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Summary.

The subjoined paragraphs give the gist of the more important matters in this issue, with the object of showing at a glance what has happened during the week. See also "Contents" in the first column.

SOME notes on the disposition of the University grant made by the House of Commons are given on p. 304.

A REPORT of an exhibition in connection with the International Congress on School Hygiene is given on p. 289.

REPORTS of meetings of the Pharmaceutical Society of Cape Colony and the Transvaal Pharmacy Board appear on p. 293.

THE Patents and Designs Bill has passed the House of Commons and the first reading in the House of Lords (p. 298).

THE OPIUM-MERCHANTS of Shanghai have petitioned the Consul-General against a proposed opium monopoly in China (p. 294).

THE summer study in the "Corner for Students" is devoted to volumetric analysis. Mr. Sage makes the subject easily understood (p. 288).

THE ATOM CONTROVERSY, which was a feature of the British Association meeting at Leicester, provides "Xrayser" with a subject for reflection (p. 301).

THE monopoly system of supplying spectacles to hospital patients is in danger of breaking down, the favoured firms not being willing to lower their prices (p. 305).

A PRIZE COMPETITION for a good denaturant for alcohol is being promoted in France (p. 292); while in Germany a mandragora extract prize is being offered (p. 295).

AMONG the photographic notes on p. 299 are a remedy for silver stains on negatives and a method of treating bichromate sores which carbon-workers will appreciate.

THE weak spot in pharmacy—the scarcity of entrants—is referred to in our Correspondence columns (p. 320), and the matter is also dealt with by "Xrayser" (p. 301).

SOME NOTES on the camphor industry are given on p. 319, from which it will be seen that considerable activity is being displayed in Japan, Ceylon, and the United States.

ALTHOUGH a good response was obtained in the prescription problem given in the *C. & D.* for August 3, none of the competitors were able to give the correct transcription (p. 300).

THE mystery of the "Karoo Nuts" has been cleared up by the help of the *C. & D.* Particulars of this nut, which is said to have caused vegetable poisoning in Southwark are given on p. 306.

A CURIOUS REPRINT of a picture of an early chemists' shop is given on p. 312, showing that the scientific trend of pharmacy was well recognised at the beginning of the nineteenth century.

THE French Customs authorities are taking steps to prevent the importation of goods bearing fraudulent British marks, and the British Foreign Secretary has been asked to interest himself in the subject (p. 305).

SULPHONAL has been used lately for adulterating pilocarpine (p. 300), other notes on the same page referring to the ash of kamala, calmatamin, pyretol, ibogaine, a new constant for oils, and sandalwood-oil adulteration.

A DISTINCT ADVANCE in photography in colours has been made by Messrs. Lumière. We give the outlines of the process (p. 302) and the formulæ for the solutions (p. 299), so that photographic chemists will be prepared to meet the demands of their customers.

WE conclude our abstracts of Dr. W. H. Martindale's "Pharmacy Notes from Various Parts of the World," the selection this week dealing with pharmacy in Russia, Sierra Leone, Turkey, Salonica, France, India, the Riviera, Portugal, Spain, Switzerland, and the United States (p. 308).

TRADE MATTERS are dealt with in several articles in this issue. The new Australian Tariff is noted on p. 303; the healthy state of British exports and imports on p. 304; foreign trade statistics for six months on p. 319; British trade with Australia, p. 305; these being in addition to the usual weekly features which give up-to-date information on the larger commerce of the drug-trade.

FEATURES are few in the drug and chemical markets, as is not unusual in the quietest month of the year. Cocoa and cocoa-butter are much dearer. Cumin-seeds are higher, and most Moroccan products are tending upwards. Heroin and heroin hydrochloride are substantially dearer. Cascara sagrada and anised oil are firmer. Copper sulphate, benzol, peppermint oil, and shellac are tending easier. Menthol and ipecacuanha are much lower (p. 315).

The Chemists' and Druggists' Diary, 1908. 40th Year of Publication.

THE preparation of this work has commenced, in order that the delivery of copies to our subscribers abroad by Christmas may be ensured. Advertisers who wish to avail themselves of the opportunity of making their announcements in the DIARY should make sure of getting space by addressing the publisher of THE CHEMISTS' AND DRUGGISTS' DIARY, 42 Cannon Street, London, E.C. The DIARY is presented free to all subscribers to THE CHEMIST AND DRUGGIST, and being in daily use by thousands of our readers throughout the year is the most esteemed and valuable advertising-medium of the kind in the world. Besides valuable and novel reference and practical information, the 1908 DIARY will contain a BUYERS' GUIDE to the agents for and makers of chemicals, medicines, and druggists' goods of all kinds. To secure entries therein it is necessary to advertise the goods in the DIARY.

English News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Brevities.

The "London Gazette" of August 13 contains the text of regulations made by the Home Secretary as to the keeping and use of petroleum for the purposes of light locomotives. A warning is also given as to the danger of explosion from petroleum spirit.

The relations between the oculist and the optician were the subject of an article in the "Daily Telegraph" this week. An official of the Spectacle-makers' Company and a hospital surgeon were interviewed, two opposite opinions being thus obtained.

Mr. J. T. Robson, chemist and druggist, manager of the drug department of Cater, Stoffell & Fortt, Ltd., Bath, who is leaving to go into business at Birmingham, has been presented by the company's employés with two silver-mounted walking-sticks and an umbrella for Mrs. Robson.

The Whitechapel Guardians have agreed that, under the new scheme, their dispenser, Mr. A. L. Anderson, shall receive his next increment of 10% on March 26, 1908, and his final increment of 10% on March 26, 1910, when his maximum salary of 170% per annum (and dinner daily) will be reached.

A hospital surgeon, Arthur Whitfield (30), who said he belonged to Edinburgh, was remanded at Brentford on August 12 on a charge of attempted suicide. He walked into Norwood Green Police Station and asked for an emetic, saying he had taken oxalic acid to counteract an incipient attack of delirium tremens.

Mr. P. A. Ellis Richards, Hon. Secretary of the Joint Advisory Committee of the Pharmaceutical Society and the Society of Public Analysts, sends us an official statement in reference to oil of juniper. This statement is the resolution part of the letter published in THE CHEMIST AND DRUGGIST, July 13, p. 44.

Messrs. Brunner, Mond & Co., Ltd., chemical-manufacturers, Northwich, have decided to add sixpence to each pound earned during the year by those engaged by them for two years, and one shilling per pound to those whose services extended over six years. The sum will be placed to their account annually, and interest at 3 per cent. added. The generosity of the firm is specially appreciated because it was unsolicited.

The drugs analysed under the Sale of Food and Drugs Acts by the public analysts for Lincoln city and for Cornwall county during the past quarter were all found to be genuine. The Folkestone borough analyst found $\frac{1}{4}$ gr. arsenic per lb. in one sample of tartaric acid. In Westminster last year seventeen prescriptions were taken, among many other things, two of which were not accurate, but it was considered unnecessary to take proceedings.

School Hygiene.

An exhibition in connection with the International Congress on School Hygiene was held from August 10 to 14 at the London University, South Kensington. The main portion of the exhibits was devoted to school building and school furnishing appliances, but a few exhibits of pharmaceutical interest were present. A handsome quadrangular case of "Izal" preparations was shown by Newton, Chambers & Co., Ltd. Cyllin preparations were shown by Jeyes' Sanitary Compounds Co., Ltd., while Dr. Ainslie Walker, the company's chemist, read a paper on "Disinfection of Schools" at the Conference, which was reprinted and distributed to visitors at the "Cyllin" stall. The "Sanitas" preparations had a neat little corner stand, and the "Sanitas" Co., Ltd., smart as usual, had a lithographed letter for distribution on "Slate-cleaning in Schools," in which the advantage of a 1-in-7 solution of Sanitas fluid was advocated. The production of the Nauheim bath in the home was demonstrated by the Aeosan Co. The company supply an apparatus (the Aeosan bath-attachment) consisting of an arrangement of sparge tubes, which is laid at the bottom of the bath. To this is attached a rubber tube leading from a cylinder of compressed CO₂ or oxygen. When the bath has been filled with water and the patient immersed,

the gas is turned on, and the patient then enjoys a carbonic-acid or an oxygen bath as the case may be. The advantages of the Aeosan attachment are that by means of it the gas is well diffused and the bath is not corroded, as sometimes happens when powders are used, and the cost of each bath of eight minutes' duration works out at 2d. The price of the apparatus complete, with a 2-lb. cylinder of CO₂ liquid, is 5/ 5s., with a good discount to the chemist retailer. The Berkefeld Filter Co., Ltd., were showing several patterns of their filters. The new laboratory-type generator for the production of ozone was an interesting object at the stall of Ozonair, Ltd. This generator is fitted complete with bell-glass, glass-lined tripod, stopcock, etc., for laboratory or research work. Dust-layers or dust-preventives were shown by the Sanitary Floor Co. ("Dustolio") and by the Dust-allayer Co. ("Florigene").

Drug-pots.

In the Royal Museum at Canterbury there is on show a collection of Lambeth delft drug-pots which is of interest to chemists. The simple blue and white ware dates mostly from the seventeenth and eighteenth centuries; the biggest, a "Diascordium" jar, is dated 1717. Smaller jars are for lenitive and mithridate electuaries, and the usual forms, the "albarello," the water-bottle shape (marked "Aq. Boraginis"), the ewer, and the ointment-jar, are all represented. There are also some pill-tiles with the arms of the Society of Apothecaries and the motto "Opifer que per orbem decor." The collection has been lent by Mr. F. Bennett Goldney, F.S.I., who is Mayor of Canterbury. The pots have not been recently added, but may have escaped the notice of pharmaceutical visitors.

Burglaries.

The premises of Boots, Ltd., in New Street, Birmingham, were entered by thieves on August 9, and about 5/ worth of silver goods was stolen.

At Plymouth on August 8, John Harris and John Thorne were remanded on a charge of being implicated in a burglary at the premises of Mr. Jabez Williams, chemist and druggist, 95 Old Town Street, and the theft of eleven bottles of perfume, valued at 1/.

Midland Notes.

Diarrhoea is very prevalent in Birmingham; eleven deaths from this cause occurred last week.

The Birmingham Market Hall fabric having shown signs of decay, it is being dressed with lime-water, which the authorities have discovered "acts well."

"Would you like to see what I had sent me last week?" asked a chemist of his friend. "I should," was the reply. The mammoth Summer Number of the *C. & D.* was produced, and the two friends are still puzzling at the conundrum, "How is it done for the money?"

A man engaged in walnut-picking found that his hand became unduly swollen. His medical man advised soaking the hand in oil. This had no effect, and the swelling continued. A local chemist recommended the application of liquid ammonia, which gave immediate relief.

The wine in the decanter on the chemist's dining-room sideboard had mysteriously decreased in volume day by day, and the owner and his family vouched that they had not tasted a drop. Vinum antimoniale was substituted, and speedily disclosed the culprit—in the kitchen, very ill.

The ladies of King's Norton are showing South African ladies how to play golf. Mrs. Brinton (well known in Birmingham as Miss Wolseley, a lady dispenser, who held several good appointments at local institutions) swept the green at Port Elizabeth some little time ago at the above pastime.

Colonel Wyley is at Porthcawl with his Warwickshire County Battalion, which has a high reputation for neatness in camp, "and the guard-mounting is smartness itself." Colonel Wyley is relinquishing the command of the 2nd Volunteer Battalion, Royal Warwickshire Regiment. He has been actively connected with the Volunteer movement for thirty-five years.

What was the matter with ink made in 1878? A local pharmacist has in his window framed certificates of that year issued by the Apothecaries' Hall and by a London

school of pharmacy. The signatures are scarcely decipherable, the dominant colour being a light brown, apparently an iron compound.

Sheffield Notes.

Mr. G. T. W. Newsholme has been appointed by the District Committee as a member of the Inquiry Subcommittee.

The Treasury Advisory Committee on the distribution of grants to colleges have recommended that for the next two years Sheffield University be granted 5,000*l*.

Mr. Bernard Ellis, chemist and druggist, had a long letter in a recent issue of the "Sheffield Daily Telegraph" on "Modern Quackery," his comments being induced by the receipt of "a pamphlet issued by a company of medical herbalists, who assume the title of doctor, and whose chief object seems to be to denounce medical men."

The report of the city analyst (Mr. G. E. Scott-Smith) for the quarter ended June last showed that among the 190 samples of food and drugs examined were two samples of vinegar, one of which consisted of malt-vinegar and vinegar derived from other sources, and the other consisted largely of dilute wood-acid, and in addition it contained 0.16 per cent. of free sulphuric acid. One only out of eleven samples of sweet spirit of nitre proved to be deficient in ethyl nitrite, and five samples of camphorated oil and two of compound liquorice-powder were found to be up to standard.

Liverpool Notes.

Here and there members of the trade are still on holiday, and their customers perhaps more so; but, generally speaking, they have laid aside the festal garments, and are now returning to the "hadden grey" of business routine.

The great pageant has come and gone; nevertheless, its brilliant success marks it down not as a transient episode of theatrical effect. Underneath the necessary spectacular elements of the exhibition there rested an earnest endeavour to fulfil a truly educational purpose. Those who took part in the portrayal of 700 years of the city's history were no mere nummers; they were representative of all grades of our social life.

There has been the usual muddle over the closing arrangements for the holidays. When every other chemist is personally unknown to the next, and in the absence of any official recommendation, it becomes impossible to have any organised system for closing of shops. This is a matter which many feel ought to receive the attention of the local Association, and it is a matter of common comment that by using their influence for combined action the Association would do more practical good in lightening the tedium of the lives of their fellow-craftsmen than in the discussion of the many petty affairs which find a place on the agenda of their council-meetings.

Cricket.

Sheffield Pharmacy Athletic Club.—The cricket team met and defeated a team of Sheffield Union officers on August 8 by 39 runs to 31.

Wholesale Chemists' and Druggists' Cricket Championship League.—A match was played at Wormholt Farm, on August 10, between Burgoyne Burbidge's C.C. and Barron Harvey's C.C., Burgoyne's winning easily by 68 runs. Barron Harvey's were all out for 14, Dealtry taking eight wickets for 4 runs and doing the "hat trick."

Leicester Pharmacy Athletic Club.—On August 1 the L.P.A.C. played the return match with the Y.M.C.A. second team at the Old County Ground, Aylestone Park, Leicester. The Y.M.C.A. batted first, and by even scoring amassed a total of 137 for nine wickets, and then declared the innings closed, giving the Chemists only about an hour and a quarter to get 138 to win. So well did they play, however, that when time was called they had made 120 with two wickets to fall, and with another ten minutes to play they might have won.—On August 8 the L.P.A.C. met the Leicester Thursday C.C. on the Victoria Park ground. In a match of low scores neither side could claim the supremacy, as both scored 58, the match thus ending in a tie.

"Kaloo" Nuts.

At the Tower Bridge Police Court on August 14, Messrs. Benjamin Brinkley & Co., Mitre Street, Aldgate, E.C., were summoned by Mr. Alfred Long, chief sanitary inspector

to the Borough of Southwark, for selling to a costermonger a quantity of nuts which upon examination were found to be unwholesome and unfit for food. Mr. Long explained that these nuts, labelled on the costermonger's barrow as—

The King of Nuts, Kaloo, from South America. First time sold in this country. Delicious flavour

—had been eaten by several children (who subsequently had to be treated at Guy's Hospital for vegetable-poisoning. The nuts when seized were found to be rancid and decomposed. Extensive inquiries were made, which resulted in it being discovered that the nuts came from China (see page 306), and had been introduced into this country for the first time. Evidence of purchase having been given, Dr. Millson, medical officer of health for Southwark, said, apart from the question as to whether the nuts possessed poisonous properties, the physical condition of the nuts was such as to render them unfit for human food. They were rancid. After further evidence, the Magistrate (Mr. Cecil Chapman) fined the defendants 5*l*., and 2*l*. 2*s*. costs.

Welsh News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor, who also invites reports on business changes and other trade matters.

Personal.

Mr. R. E. Denver has opened a patent-medicine store at 14 Wharton Street, Cardiff.

Alkali Reports.

The Hon. Ivor Guest, M.P., has presented to the Cardiff Public Library a set of the reports on alkali-works, except three volumes out of print. These will be very useful in connection with the Glamorgan County Council's courses of instruction in agriculture at University College.

Misrepresentation.

A chemist named Shelley, at the Newport County Court on August 9, successfully resisted an attempt by the Provincial Advertising Co. to recover a sum of 2*l*. 12*s*. 6*d*., rent payable in advance for a space in an advertising-cabinet. Mr. Shelley's defence was that the cabinet had not been placed in the position agreed upon, being partly hidden by a shop-window blind, and further that the glass had become so dirty that the advertisements could not be seen. Judge Owen held that the agreement was bad on the grounds of misrepresentation as to the place where the cabinet was to be fixed, and gave judgment for Mr. Shelley, with costs. An application for permission to appeal was refused.

Contracts.

At Tredegar Board of Guardians the difficulty of obtaining drugs owing to the small quantities used has been again discussed on attention being directed to the subject by the medical officer, and it has been decided to get supplies alternately each quarter from local tradesmen. For this purpose a recent resolution has had to be rescinded.

The medical superintendent of the Cardiff new Mental Hospital has been authorised to purchase electro-therapeutic apparatus from Messrs. Miller & Co., Hatton Garden, London, Messrs. Watson & Son, High Holborn, London, and Mr. K. Schall, New Cavendish Street, London, W., to a value not exceeding 142*l*. The Corporation have also accepted the tender of Messrs. Becker & Co. for a pathological laboratory equipment at 91*l*. 1*s*. 7*d*., and the Watch Committee have given an order to Messrs. Duck & Son, chemists, for photographic materials and sundries.

Early Closing.

A matter which the Newport Chemists' Association might well discuss is that of early closing. At present the shops are kept open in some cases till ten o'clock at night, whereas all the business worth doing might easily be done before eight o'clock. By the way, the local Chemists' Association is practically a dead letter in Newport. I should not (adds our correspondent) like to say how many months have elapsed since they met.

A Knotty Point.

Rather a novel point was raised at the Llanely County Court on August 13, in which Mr. D. Williams, J.P., and

others, as executors of the estate of the late Mr. Gwilym Evans, J.P., D.L., of quinine bitters celebrity, sued the Llanelly and District Mutual Plate-glass Insurance Co. for 15*l.* 11*s.*, the cost of repairing a broken plate-glass window. The evidence, heard at the previous court, was to the effect that the late Mr. Evans had insured the plate-glass windows at Castle Buildings for twelve months. After the death of Mr. Evans the buildings were sold to Mr. Evan Jones, Bryn-rhodyn, and a plate-glass window was subsequently broken. As no steps had been taken by the executors to have the insurance-policy transferred to Mr. Jones, the defendants contended that they were not liable to pay the amount claimed. Judge Bishop reserved decision pending further argument.

Irish News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Belfast Strike.

The difficulty which local firms in the trade have had with carting their goods in certain parts of Belfast has been overcome by the employment of military in the streets, and no further interference has taken place with the vans of drug or chemical firms.

Queen's College, Belfast.

Sir Donald Currie has given a further 2,000*l.* towards the equipment fund of Queen's College, Belfast. This makes 22,000*l.* that Sir Donald has contributed to the fund, which was inaugurated seven years ago to make the college more worthy of the commercial capital of Ireland. During that period the total sum collected has been upwards of 80,000*l.*

Recoupment.

The Cavan Guardians have been asked to explain the relatively large amount spent on drugs in the last half-year. The explanation given by the doctor is that he orders yearly and that he expected an epidemic of diphtheria.

The Newry Guardians, prompted by the L.G.B., have asked Dr. Bell, of Warrenpoint, why he did not submit the drug-invoices promptly; and have received the reply that the invoices reach him in good time, but the drugs do not come till a month after. The contractors are now to be communicated with.

Imports and Exports.

According to a return issued by the Department of Agriculture of Ireland the total value of chemicals, drugs, fertilisers, and dye-stuffs imported in 1905 is estimated at 1,036,496*l.* In the case of drugs and chemicals, goods of this class are frequently sent in small consignments, and the figures given are probably considerably lower than the actual values imported. As regards artificial fertilisers, the estimated value in 1905 is placed at 597,206*l.* There is also a considerable export trade estimated in 1905 at 132,686*l.* Dye-stuffs imported in 1905 were of a value estimated at 51,905*l.*

Scotch News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Personal.

Mr. Peter Crombie, chemist and druggist, late of Pollokshaw's Road, Glasgow, has joined the representative staff of the National Cash Register Co.

Aberdeen.

Several "Hazeline Snow" displays are to be seen this week in various pharmacies throughout the city.

At the half-yearly meeting of the Court Granite City Lodge, Ancient Order of Foresters, Mr. Wm. Wallace, King Street, was appointed chemist to the Lodge, and Dr. J. E. Milne physician.

The profits of the Northern Co-operative Co., Ltd., for the past year amount to 89,403*l.* To that amount the drug-store belonging to the company contributes the modest sum of 402*l.*, the turnover being 1,402*l.* A dividend of 3*s.* 1*d.*

per pound is being paid on goods purchased by shareholders, and 5 per cent. on the paid-up capital.

Mr. James Henderson Mackay, M.A., M.B., Ch.B., whose death took place at Manchester recently, was a son of the late Mr. David Mackay, chemist and druggist, who about twenty years ago carried on a large drug-business at the west-end of Union Street, Aberdeen. Dr. Mackay graduated at Aberdeen University, and was for a few years assistant medical superintendent at Aberdeen Royal Asylum.

Edinburgh.

Baillie Richard Clark (Raimes, Clark & Co.) is lying ill in the Station Hotel, Inverness.

A certain prescription, carefully snipped from the newspapers, is much in evidence in the city just now. Possibly the sale of tinct. buchu and syr. limon. is increased thereby.

The West.

West Coast chemists had a brisk time last month.

A rumour is current that a chemist's shop is to be opened in Paisley Road, Glasgow.

Mr. Richard J. Owens, chemist and druggist, Duke Street, Glasgow, has removed to more commodious premises in the same street.

A young woman threw a quantity of carbolic acid at a man in Kinning Park, Glasgow, the other day, injuring his face and one eye. The woman was taken before the Sheriff, who sentenced her to three months' imprisonment.

The Week's Poisonings.

SINCE our last record ten fatal cases of poisoning have been reported, two being cases of lead-poisoning, caused, it is surmised, by taking diachylon in pills to procure abortion. The victims in these cases were Mary Rowbottom, of Wadsley, and Matilda Crummack, of Swinton.—The only other unscheduled poison used was phosphorus taken in the form of match-heads by Mary Clark (49), of Stainland. Oxalic acid caused two deaths. It was taken by Arthur Miller (54), of Belfast, and by Francis Carpenter (51), of Islington.—James Robertson, a Driffield draper, poisoned himself with laudanum, and the same narcotic caused the death of Annie Stone, a domestic servant, of Cheetham.—Mrs. Carlisle, an elderly lady belonging to Sheffield, was poisoned with carbolic acid by the mistake of a servant-girl, who gave her a draught from the wrong bottle.—Dr. Malcolm L. Wargrave, of Moffat, who could "not stand the waiting game any longer," ended the struggle with morphine.—George Britton Syrett (51), a licensed victualler, at the Bedford Head, Tottenham Court Road, London, committed suicide by taking prussic acid.

Information Wanted.

Inquiries for the names and addresses of manufacturers, or other trade information, not traceable by reference to the advertisement-pages of "The Chemist and Druggist" and the "C. & D. Diary," or not filed in our private register, are inserted here free of charge. Postcard or other replies to any of the sub-joined inquiries (addressed to the Editor "The Chemist and Druggist," 42 Cannon Street, London, E.C.) will be esteemed.

- 197/2. Makers of Electric rat-paste.
- 198/67. Makers of, or agents for, Tormentilla Soap.
- 200/62. Where can Proctor's Lozenge Board be obtained?
- 91/19. Who is the maker of Crossley's malted food for infants?
- 198/68. Makers of Liquor Calcis Iodinatis, or where obtainable.
- 197/12. Names of suppliers of mechanical figures for shop-windows.
- 87/40. Who makes or sells phonograph records for teaching languages?
- 195/46. Address of Gustave Daubenspeck, who discovered a cancer-cure.

French News.

(From the "C. & D." Paris Correspondent.)

HONOURING BERTHELOT.—The Paris Municipal Council has formally decided that the Place du Collège de France shall henceforth be named the Place Marcelin Berthelot.

MOISSAN'S SUCCESSOR.—M. H. Le Chatelier, professor at the College of France, has been officially nominated Professor of Chemistry at the Paris Faculty of Sciences in place of the late M. Henri Moissan.

ESPERANTO.—At the moment when the International Esperantist Congress is being held at Cambridge (August 9 to 17) it may be interesting to note that the Secretary of the Paris Group of Esperantists is Dr. Roblot, of Charenton, who specialises in medical Esperanto; while pharmaceutical matters are dealt with by M. Rousseau, pharmacist, of Levallois, and M. Peloille, of Paris, recently alluded to in the *C. & D.* in an article on "Pharmaceutical Esperanto."

ETHER FIRE.—A serious fire took place this week at a pharmaceutical works at Les Lilas, owned by Paul Macquaire & Co. Two workmen in moving a carboy of ether, let it fall. The carboy broke, and almost at once the vapour of the ether took fire at a stove some yards away. In an instant the whole of the woodwork of the laboratory where the accident occurred was in flames, and ten workwomen engaged there were in great danger, two of them being seriously burned. It was some hours before the outbreak was subdued.

AN ABSINTHE COMPROMISE.—The conclusions of M. Schmidt's report, recommending the total prohibition of absinthe, were not favourably received by the Committee of Public Hygiene. The draft law to be presented to Parliament after the summer vacation will propose the prohibition of the common absinthes manufactured with industrial spirits and adulterated essential oils, but will tolerate the higher-class article distilled from spirit of wine. This compromise appears to have been effected by two facts (1) that the total suppression of absinthe would mean a heavy loss to the Budget; (2) that if absinthe were prohibited a long list of "aperitifs" (bitters, etc.) would have logically to be also done away with.

PHARMACIE CENTRALE.—The annual list of outings of the Amical Association of Students of Pharmacy invariably includes a visit to the Pharmacie Centrale. This year the party was "personally conducted" by M. Moureu, the newly nominated Professor of Chemical Pharmacy at the Paris Superior School, his colleagues, MM. Delépine and Guéguen, assistant professors, and M. Herissey, the well-known hospital pharmacist. The historical Hotel d'Aumont (the Paris manufactory) was first visited, the bandage workshops, the laboratories, etc., being inspected in turn. The preparation of atoxyl, now carried out on a large scale, and the crystallisation of cocaine (by acetone) particularly interested the youthful visitors. After lunch the party were conveyed by brakes to the St. Denis works, where M. Buchet received the students.

SCHLAGDENHAUFFEN'S WORK.—The following is a list of the theses and other works of the late Professor Schlagdenhauffen (*C. & D.*, August 3, p. 205), and will interest scientific pharmacists:—*Theses* (1851): On the connection between chemistry, physics, and toxicology; (1857), on the polarisation of quartz; researches on sulphide of carbon; (1863) the history of some compounds of cyanogen; physical forces, and their intervention in the phenomena of absorption; the present state of electro-physiological sciences. *Translations*: Hoppe Seyler's "Chemical Analysis" (1877); Gorup's "Physiological Chemistry" (1880); Dragendorff's "Vegetable Chemical Analysis" (1885). *Writings*: A "Treatise on the Chemical Analysis of Organic Liquids and Tissues" (1888, in collaboration with Dr. Garnier); in collaboration with Professor Heckel (now at Marseilles) a number of pamphlets on kola, African cinchona, fengedgosa-seeds, the M'boundon of the Gaboon negroes, the baobab, etc.; in collaboration with Professor Oberlin, on the localisation of tannin, on *Schotia latifolia*, and on the Schinzsnach waters.

DENATURISED ALCOHOL.—The Committee on Analytical Methods has defined the programme for the competitions for the prizes offered for alcohol-denaturation in connection

with the law of November 29, 1905. This Act instituted two prizes: one of 800*l.* for the discovery of a "denaturator" more advantageous than those now used while safeguarding the revenue against frauds, and a second (2,000*l.*) prize for a system of utilising alcohol for lighting in the same manner as paraffin." The denaturator must have a taste and smell which will effectually discourage any desire to use the alcohol as a beverage; wine or date must, oil of thyme and rosemary, and similar flavours are thus eliminated. The denaturant should not be sufficiently objectionable in smell to prevent its domestic or industrial use—thus acetylene, asafetida, and garlic are excluded. No soluble substance which could leave a deposit on lamp-wicks, and thus render combustion difficult, may be used, such as sea-salt, sodium sulphate, alum, ammonium chloride, potassium ferrocyanide, picric acid, tobacco-juice, and aloes. It must not consist of a substance much more or less volatile than alcohol and which could thus (besides other disadvantages) be removed by fractional distillation, as ether, carbon bisulphide, light fractions of petroleum or turpentine, cresyl, carbolic acid, camphor, or naphthaline. It should contain no substance which might injure the metallic part of lamps or motors (ammonia, nitro-benzene, sulphuric acid). It should not be poisonous (as mercuric chloride, methyl cyanide, sodium arseniate, and aniline) or contain poison (hyoscyamus, aconite, or digitalis). It should be sufficiently inexpensive, should not normally exist in commercial alcohol, and its presence in alcohol should be capable of easy and certain detection.

FRENCH PHARMACEUTICAL "EX-LIBRIS," or bookplates, are comparatively rare, but a few may be sometimes traced by the persevering collector. M. Guéguen, Assistant-Professor of the Paris Superior School of Pharmacy and General Secretary of the French Mycological Society, has a very handsome and appropriate design. A nude female figure, representing Nature, holds aloft the torch which lights and guides the way of progress. Behind is an open book, one page inscribed with the names of great pharmacists, and the other showing the principal species of French fungi. A mortar is on the one side and a microscope on the other; while seashells and a marine landscape are also introduced. The motto is *Nil sine Testimonia*. Dr. Cabanès, an ex-pharmacist who edits the "Chronique Médicale" (from which I gather these details), and makes a special study of the medical side of historical events, has an allegorical bookplate showing Truth emerging from a well, bearing the enigmatic device *Veritas Vanitas*. The Imperial eagle and the Gallic cock seem alike to find their reflection (in the mirror she holds aloft) disquieting, if not terrifying, and the lion, symbolising modern France, is but a little more reassuring in his mien. Medical bookplates need hardly be noticed here, but that of Dr. Raphael Blanchard, Professor of Parasitology at the Paris Faculty of Medicine, deserves a passing comment for its originality, the tapeworm and *Anopheles maculipennis* (malaria mosquito) centre forming a far more pleasing and artistic whole than one would have deemed it possible to design with such unpromising materials.

COLLECTIVE CARICATURES of the professors of the Paris Faculties of Law and Medicine were lately published, and M. Fuchs, a clever black-and-white artist, has followed suit with the "Professors of the Paris School of Pharmacy," a five-franc sheet published at Maloine's. The background represents a portion of the historical "Salle des Actes." The central figure is M. Guignard, whose hawklike features hover over a flower-pot containing a finely flowered specimen of the poisonous haricot. He is flanked by the late Professor Moissan, who, placing his foot in the electric furnace, grips the cathode in his hand. M. Grimbart's bacteriological studies are sufficiently indicated by the cotton-stoppered tube of culture; M. Bourquelot, as Professor of Galenical Chemistry, conscientiously pestles his mortar. M. Daniel Berthelot plays with a well-known toy founded on a simple fact in physics, and M. Couzière, Professor of Zoology, holds a diminutive specimen of the genus homo. The late M. Prunier and the whole present professional staff also figure. Each well-known face is comically, but not insultingly, exaggerated, and the broadsheet is well worth the modest "thune" demanded to anyone personally acquainted with the men depicted.

South African News.

(From the "C. & D." Correspondents.)

Note.—"The Chemist and Druggist" is regularly supplied by order to all the members of all the Pharmaceutical Societies in British South Africa, viz.:

South African Pharmaceutical Association.
Pharmaceutical Society of Cape Colony.
Natal Pharmaceutical Society.
Transvaal Pharmaceutical Society.
Rhodesia Pharmaceutical Society.
Northern District Chemists' Association.
Pharmaceutical Society of Orange River Colony.

Cape Colony.

REBATES ON FREIGHTS.—In consequence of the altered shipping freights to South African ports, the various South African railway administrations have decided that rebates shall be given of the difference between freights before and after July 1 last on goods shipped from Europe by the Conference Lines and forwarded direct from ship or bond at Cape Town, Port Elizabeth, or East London, and on goods from open stocks at the same ports, provided they are packed in original and unbroken packages, to the following areas in the Orange River Colony and the Transvaal: Orange River Colony—Edenburg: Viljoen's Drift, including Winburg, Heilbron, and Parys branches; Bloemfontein: Bethlehem, including Ladybrand and Maseru branches; Kroonstad: Bethlehem. Transvaal—Vereeniging, Springs, Pretoria, Vierfontein, Zeerust. Rebates will be paid by the goods superintendents of the several railway administrations.

PHARMACEUTICAL SOCIETY OF CAPE COLONY.—A Council-meeting of the Society was held on July 18. Mr. J. S. North (President of the Society) was in the chair, and there were also present Messrs. W. Froembling, Ph.D., J. Jones, G. Darroll, A. E. Tothill, J. Austen Thomas, J. Snowden, and J. Dell (the Secretary). Before commencing the business it was unanimously agreed that the Society write expressing the sympathy with Mrs. Kernick and family in their sad bereavement. It having been brought to the notice of the Society that quinine was being sold to farmers in the Vryburg district at 1s. 3d. per oz. by the Government, the Secretary wrote to the Pharmacy Board, asking if they could give any information regarding the matter, and a reply was received to the effect that the Director of Agriculture stated that the quinine supplied to the farmers of the above district was used solely for malarial catarrh in sheep. After some discussion it was agreed that the Secretary write Mr. De Koch, the Parliamentary representative of the above district, and ask him to lay before the Government the injustice of this action to chemists. The opium regulations were then discussed. They were considered far too rigorous, and one member said they were a hindrance to legitimate business. It was decided, on the proposition of Mr. J. Jones, seconded by Mr. G. Darroll, that a committee be formed to draw up more suitable regulations and to lay them before the Government, the committee to consist of Messrs. J. S. North, D. K. Petersen, A. J. Rivett, G. Darroll, J. Jones, and the Secretary. In the annual report of the Cape Medical Council it was suggested that the ingredients of all patent and proprietary medicines should be printed on the labels, and, seeing the subject down for discussion in the House of Assembly, the President wrote to the Colonial Secretary asking him to receive a deputation of local chemists, as they wished to place their views before him before the date of discussion in the House. No reply had been received.

Natal.

GENERAL BUSINESS in the drug-trade does not seem to have improved to any appreciable extent, though there is a feeling prevalent that better times are near at hand.

RICIN-POISONING.—An interesting poison case came before the local court recently, in which two Indian coolies are supposed to have poisoned a fellow-countryman with castor-oil seeds; ricin, the poisonous principle of the seeds, evidently having a fatal effect. The prisoners are remanded for trial.

THE SOUTH AFRICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE held its annual meeting in Durban from July 15

to July 19. The subjects discussed were varied. Among the papers were: "Some Observations on Entomophalous Flowers," by Dr. R. Marloth, M.A.; "The Homology of the Mammalian Alisphenoid Bone," by Dr. R. Broom, D.Sc.; "The Origin of the Flora of South Africa," by Dr. S. Shonland; "The Standardisation of Coal Analysis," by Mr. H. H. Puntan, M.P.S., F.C.S., borough analyst for Durban. The meetings were well attended, though chemists were conspicuous by their absence.

JULY IS THE GALA MONTH of the Brighton of South Africa (writes a Durban correspondent), there being a regular holiday feeling in the atmosphere, the weather at this time of the year being simply glorious. Since the beginning of the month Durban has been inundated with visitors, all intent on enjoying the gifts which Nature has bountifully bestowed on this beautiful town. The municipality has done all possible to encourage visitors by "improving" on Nature. The ocean beach has been opened up with a well-laid esplanade, on which a bandstand has been erected; shallow ponds have been laid down, in which the smaller children may disport themselves without anxiety to their guardians; and a safe bathing-enclosure for adults has been erected.

DURBAN AND COAST AGRICULTURAL SOCIETY'S SHOW was held on July 18 to July 20. This is the event of the year, all stores closing on the afternoon of the second day. The exhibition of industries was of a very high class. Among mineral waters there was good competition, six first prizes going to Webb's mineral-water works, in which a local chemist is largely interested. Messrs. Fenwick & Co., agents for Jeyes' disinfectants, had a very fine show of the Jeyes' products. One of the prettiest and most imposing stands was that of Messrs. Allen & Hanburys (Africa), Ltd., under the directorship of the local manager, Mr. Tulett, jun., assisted by Mr. King, the well-known A. & H. representative. The main features of the stand were "Allenburys" dietetic products, feeders, foods, etc. The Allenburys' jujubes and pastilles were given a prominent place, not to mention toilet-soaps of all descriptions. Vapo cresoline was also well shown. Samples of milk-chocolate were given away freely, as were also cups of the firm's new product, milk-cocoa.

Transvaal.

TRANSVAAL PHARMACY BOARD.—The monthly meeting of the Transvaal Pharmacy Board was held at Johannesburg on July 19, under the presidency of Mr. J. H. Dinwoodie, the others present being Dr. J. van Niekerk, Messrs. R. Butters and Charles Keir, and the Secretary (Mr. W. A. J. Cameron). A communication was received from the Law Department requesting an expression of the views of the Board on the subject of certain remarks made by a Justice of the Peace in respect of the death of a boy who was poisoned by drinking a quantity of Cooper's sheep-dip as a medicine for worms. The Justice of the Peace recommended that, in view of the dangerous nature of this substance and of the fact that the farmers frequently took it for medicine, steps should be taken to have it distinctly labelled "Poison." The Secretary was instructed to point out that Cooper's sheep-dip, containing as it does a considerable proportion of arsenic, is a poison within the meaning of the Ordinance, and as such is already subject to the provisions of the law as regards the necessity for its being labelled "Poison" and a record of the sale kept; and, further, that no inquiries appear to have been made as to whether the precautions provided by law had been fully observed both by the seller and the purchaser of the poison. The official records in the case in which a registered chemist had been found in illegal possession of opium, an offence for which he had been convicted and fined in the Magistrate's court, having been read, it was decided that the person referred to be informed that an inquiry would be held into the matter by the Board at the next meeting, when an opportunity would be given him of showing cause why his name should not be erased from the Register of Chemists and Druggists. A list of permits to import opium recommended during the preceding month was confirmed.

CAETAGENA "BALSAMS."—The exports of "balsams" (principally copaiba) from Cartagena during 1906 were as follows: To U.S.A., 13,366 lb. (471%); to the U.K., 1,579 lb. (68%); to Germany, 8,310 lb. (418%); and to France, 10,914 lb. (304%).

Australasian News.

The fullest information regarding the Australasian drug-trade and pharmacy is given in "The Chemist and Druggist of Australasia," copies of which can be obtained at 6d. each, post free, from the office of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Note.—"The Chemist and Druggist" is regularly supplied by order to all the members of the following, among other societies:

Central Pharmaceutical Association, N.Z.
Otago Pharmaceutical Association, N.Z.
Pharmaceutical Society of New South Wales.
Pharmaceutical Society of Queensland.
Pharmaceutical Society of South Australia.
Pharmaceutical Society of Tasmania.
Pharmaceutical Society of Western Australia.

The Commonwealth.

PROPRIETARY MEDICINES.—In the House of Representatives on July 4, one of the first days of the sitting of the Commonwealth Parliament, Mr. Thomas asked the Minister of Trade and Customs what action had been taken by the Government to enforce the resolution unanimously carried by the House of Representatives last Parliament, affirming that all patent medicines imported into the Commonwealth should be labelled with a full description of their component parts. Sir William Lyne replied that he could not quote from memory the regulations governing the importation of patent medicines; but instructions were given for the carrying of the resolution into effect as far as possible, and he believed that they were complied with.

HEADACHE-POWDERS.—A paper called the "Lone Hand" is trying to create a sensation about acetanilide headache-cures, and calls on Australian chemists to put a check on the sale of such cures. To back up its opinion of the danger of acetanilide headache-powders, the journal quotes Taylor's "Medical Jurisprudence" and refers to a death that occurred some years ago from taking a "Daisy" powder. The "Chemist and Druggist of Australasia" says: "There is no more danger in the use of headache-powders than there is in the use of eucalyptus oil. Far more fatal cases or cases of serious illness can be recorded from the use of eucalyptus oil in Australia than from the use of headache-powders. Yet there is no suggestion that eucalyptus oil should be abandoned because a few through carelessness or accident have taken overdoses."

New South Wales

EXTRACT OF RABBIT.—A company has purchased premises in Blayney for the establishment of rabbit-extract works, and machinery is now being installed. The extract will be preserved in tins and exported to England for sale.

Victoria.

POISONS SCHEDULE ADDITIONS.—The Governor-in-Council, at the Executive Council meeting on June 18, has declared that the following articles shall be deemed to be poisons within the meaning of the Victoria Poisons Act, 1890: (1) Heroin and its salts; (2) cocaine and its salts and all solutions and preparations; (3) mercuric iodide; (4) mercuric sulphocyanide; (5) mercurous iodide; (6) strophanthus and its preparations; (7) croton oil; (8) lysol.

A DENTAL ANÆSTHETIC.—Dr. John T. Tunnock, of Footscray, has devised a dental anæsthetic by means of which several patients have drawn their own teeth in public without displaying any discomfort. The Royal Hall, Footscray, where the demonstration was made, was occupied by about 600 people, and the audience included a dental surgeon and some of the students of the Melbourne Dental College. Dr. J. T. Tunnock has written to the King stating that he will adopt any suggestion His Majesty may make as to giving particulars of his discovery, the result of many years of experience and research, to the world, without fee or reward.

A BLASTED HOPE.—She was pretty, and the young chemist's assistant was glad to sell her a stamp. Also to weigh her letter. Also to lick the stamp and affix it to the envelope. "Put it on upside down, please," she simpered. "That means something to Charlie." Then the young chemist's assistant lost interest.

India and the East.

OPIUM-HOUSES.—The proprietors of the opium-houses in the city of Shanghai which have been closed were rewarded with medals as a recognition of their dutifulness in obeying the regulations.

FORMOSA TURMERIC.—In 1906 the island of Formosa exported 11,043 cwt. of turmeric, valued at 4,002l., as compared with 5,511 cwt., valued at 1,435l., in 1905. It was shipped to Hong-Kong and Shanghai from the ports of Anping and Takow (South Formosa).

EXAMINATION ITEMS.—Twelve persons were registered as qualified chemists last month at Tokyo, and 112 passed the first examination this year. There were 862 candidates. The Department of Education of Japan has announced that the second qualifying examination will be held on September 5, 1907—the theoretical examination at the local Government building, the practical at Tokyo and Osaka.

DRUG-INSPECTORS' TRAINING.—Lectures are to be given during the present month at the Imperial Hygienic Laboratory, Tokyo, specially for inspectors of drugs and chemicals. The subjects include Japanese Pharmacopœia, materia medica, Pharmacopœia preparations, surgical dressings, tablet-making, chemicals and pharmaceutical history (two hours a week each), pharmacy-regulations (three hours), chemical weights and measures (one-hour), and practical examination (twelve hours).

PHARMACEUTICAL EDUCATION.—Students in pharmacy are increasing in number in Japan year by year, and pharmacy schools are becoming more numerous. A new building is being added to the school of pharmacy at Kyoto, at which six students graduated on May 21. There are 152 male and fifty female students at present in that school. At the Osaka College of Pharmacy fourteen students have graduated this session. The total number of candidates for the qualifying examination in pharmacy this year is 200.

AMONGST FOREIGN INSTITUTIONS and museums to which the Indian Forestry Department have during the past year furnished botanical specimens and varieties of timber, is the Arnold Arboretum, in the United States, to which many specimens of the Indian pine were sent. British and foreign Colonies owe a good deal to the department in securing plants and seed for experimental purposes. During last official year the British Colonies assisted in this way were the Mauritius and the Transvaal. These were supplied with seeds of oak, pinus, juniper, dabbergea, sissoo, *Cedrus Deodara*, and bamboo. The British East Africa Protectorate received a quantity of teak seeds. German East Africa was supplied with several species of bamboo seeds for cultivation, while the Federated Malay States obtained a supply of pardouk seed for trial.

BRITISH OPIUM-MERCHANTS' PROTEST.—The British opium-merchants of Shanghai have addressed a petition to Sir Pelham L. Warren, H.M. Consul-General, regarding their rights and facilities for dealing in that drug. It appears that some of the Chinese opium-dealers at Shanghai have received information from their clients at Nanking that the Viceroy there intends granting the monopoly of the opium-trade in Nanking to a few dealers who only will be allowed to import opium there. It is also reported that a similar monopoly is to be given in Shanghai and elsewhere. The British merchants are naturally much alarmed at the prospects of such an interference with their business, and call upon the Consul-General to take immediate action and oppose the movement, as such is in contravention to Article X. of the Nanking Treaty of 1842, which provides that British merchants having paid the regulated Customs and dues, such merchandise may be conveyed by Chinese merchants to any province or city in the Chinese Empire. Such monopolies, it is maintained, would prevent other dealers from participating in the opium-trade, thus destroying healthy competition and causing heavy loss to the importers, who will be at the mercy of the few who hold the monopolies. The petition is signed by David Sassoon & Co., Ltd., E. D. Sassoon & Co., Ltd., E. Pabance, Cawasjee Pallonjee & Co., S. J. David & Co., A. Ebrahim & Co., Tata & Co., P. B. Petit & Co., D. E. J. Abraham, and others.

Colonial and Foreign News.

PHARMACISTS' APPRENTICES in Russia are, by order of the Medical Council, to be limited to two for each pharmacy having one master and one qualified assistant.

A UNION OF PHARMACEUTICAL MANUFACTURERS has just been formed in Berlin, with the object of establishing trade in pharmaceutical preparations on a sounder basis. The business offices are in Hamburg.

LEGISLATION REGARDING SECRET REMEDIES in Germany is imminent. A Bill dealing with the subject has been prepared by the Minister for Home Affairs, and details will shortly be submitted to the Federal Governments.

HYGIENE CONGRESS.—The fourteenth International Congress for Hygiene and Demography will meet at Berlin on September 23. More than 1,400 applications for tickets have already been received, among the visitors being delegates from the German and other Governments. The Secretary is Dr. Nietner, 9 Eichhornstrasse, Berlin.

CHOCOLATE QUININE TABLETS IN ITALY.—It has long been the wish of the Italian Financial Board to add the sale of chocolate tablets containing tannate of quinine to the existing State monopoly of the sale of quinine. For the third time, however, the Higher Health Commission has refused to sanction this step, and has expressed the desire that further experiments should be made with regard to its properties.

THE GERMAN MEDICINE-TAX, according to which the price of prescriptions is calculated, was on July 1 officially introduced into the Grand Duchy of Luxemburg. To reckon the German money into the currency of the country—viz., francs and centimes—a quarter is to be added to the amounts given in the tax. Further, for medicines and articles supplied to sick clubs and for veterinary use, a discount of 20 per cent. must be deducted.

TRIESTE SPONGES.—Among the branches of trade which flourish in Trieste is the trade in sponges. There are nine factories engaged in the working of this article. Enjoying the benefit of moderate expenses for preparation and bleaching, Trieste merchants are enabled to find a ready market for their goods in Austria-Hungary, Germany, Switzerland, North European countries, and in America, in competition with sponges of other origin, and this with increasing success.

A CHANCE FOR RESEARCHERS.—The President of the German Colonial Society offers a prize of 150*l.* for a method to produce an extract from mangrove bark that will impart as light a colour as possible to leather and will only slightly darken by exposure to light. The mangrove bark contains a large amount of tannin and also a red colouring-matter that prevents the bark and its extract from successfully competing with other tanning agents. The problem to be solved is the practical removal of this red colour. Competitors are invited to send in their methods by July 20, 1908, to Deutsche Kolonialgesellschaft, Schellingstrasse 4, Berlin.

AN ANALYTICAL COMPETITION.—The "Pharmazeutische Praxis" of Vienna has started a competition which marks a departure from the conventional. In consequence of most of the galenicals being now supplied by wholesale houses, says the journal, the pharmacist's work in the laboratory has assumed less of a preparative and more of an analytical character. The pharmacist has to satisfy himself on three points: the identity of the goods, their purity, and standard. For many compounds adequate methods are wanting to allow of their absolute identification, and this field of work should find eager adherents in the pharmaceutical laboratory. To further this end the "P. P." propose to open several prize-competitions yearly to discover the best laboratory methods. The subjects will be so chosen as to enable the apotheker, with his relatively small stock of apparatus, to enter the competition. The first competition (to be solved by November 1) is a characteristic reaction for the determination of extract of cascara sagrada. The reaction has to fulfil the following conditions: (1) It must be sufficiently sensitive; (2) easy to perform (that is, demand but little time, the use of few reagents and operations, and no special apparatus); and (3) it must be specific, and not hindered by the presence of other bodies.

Pharmaceutical Society of Ireland.

COUNCIL-MEETING.

THE monthly meeting of the Council was held on August 7, at the Society's House, 67 Lower Mount Street, Dublin. The President (Dr. Walsh) was in the chair, and the other members of Council who attended were the Vice-President (Mr. John Smith), and Messrs. William Doig (Belfast), H. V. Goldon (Birr), J. E. Connor (Newry), George D. Beggs (Hon. Treasurer), and David M. Watson (Dublin).

PHARMACY BILL AND B.P.C.

THE PRESIDENT said he presumed they were all aware that the Poisons and Pharmacy Bill had been dropped. It might possibly be brought in again next year, but for some months, at all events, they would be able to draw breath. He wished also to mention that the members of the Council who went as delegates to the Conference at Manchester had a very pleasant time of it. They got a right royal reception from the local committee, who spared no pains to make their visit a pleasant one.

SHEEP-DIPPING.

MR. GOLDON, alluding to sheep-dipping, said sulphate of copper is now being sold broadcast in the country. Could the Society take any notice of unqualified persons selling it to farmers and shopkeepers?

THE PRESIDENT: It is not a scheduled poison, and, therefore, we have no power to prevent its sale by anybody.

THE VICE-PRESIDENT: The subject of the very indiscriminate use of insecticides cropped up at the Conference at Manchester, and one medical man gave it as his opinion that enteric fever, which is so prevalent in the present day, is largely due to the spraying of potatoes and other vegetables with sulphate of copper, and he ascribed appendicitis to the same cause.

THANKS.

A letter was read from Sir William J. Baxter, J.P., returning his sincere thanks to the Council for the vote of congratulation which they had passed to him on the occasion of his receiving the honour of knighthood. He estimated very highly the kind and appreciative words which had been used towards him, more especially as his attendance at the Council had not been so frequent as he desired.

DONATIONS AND REPORTS.

A letter from the Under-Secretary of State for the Colonies enclosed a copy of a Proclamation by the Acting High Commissioner of Northern Nigeria entitled "The Registration of Medical Practitioners and Dentists' Proclamation, 1906."

A donation was received from the Smithsonian Institution of eight pamphlets, being reprints from their Report for 1905.

On the motion of Mr. CONNOR, seconded by Mr. BEGGS, thanks were voted to the donors.

Reports from the Examiners and the Law and House Committees were read and dealt with.

NEW MEMBERS.

The following gentlemen were elected members of the Society: Mr. Edward Cahill, Ph.C., 31 Lower Mount Pleasant Avenue, Rathmines; Mr. Robert Irwin Eccles, Ph.C., the Athy Pharmacy, The Square, Athy; Mr. William Murphy Kennedy, Ph.C., the Medical Hall, Holywood, Belfast; Mr. Isaac Whan Parker, Ph.C., 4 Darling Street, Enniskillen; Dr. Robert Aloysius Hamilton William, Ph.C., the Medical Hall, Fermoy; Mr. Michael Francis Brennan, Ph.C., Medical Hall, Rathdowney, Queen's county; Mr. Morgan Michael Joseph D'Arcy, Ph.C., the Medical Hall, Tipperary; Mr. Charles Albert Jones Troughton, Ph.C., 2 Lansdowne Villas, Lansdowne Road, Belfast.

Mr. John Breen, of Danescastle, Carrig-Bannon, Wexford, was elected an Associate Druggist.

The following were nominated for membership of the Society: Mr. Michael Carroll, Ph.C., c/o Mr. D. J. McGrath, Ph.C., Medical Hall, Bagnalstown, co. Carlow; Mr. James Bowie Faichney, Ph.C., c/o Mr. F. Maxwell,

M.P.S.I., Dalkey, co. Dublin; Miss Annie Ethel Roberts, Ph.C., The Square, Enniscorthy.

The following were nominated for election as Associate Druggists: Mr. James Keating, Tagnon, co. Wexford; Mr. Henry Hamilton, Swinford, co. Mayo; and Mr. Joseph J. Dowling, 46 Mary Street, Dublin.

The Council then adjourned.

Legal Reports.

Sale of Food and Drugs Acts.

CASSIA.

At Darlington, on August 12, Fredk. Fryer, Haughton-le-Skerne, was summoned for selling ground cassia containing 10.86 per cent. of extraneous mineral matter, of which at least 9 per cent. was sand. For the defence it was stated that it was impossible to have cassia pure owing to the method of production. The tin from which the sample was taken was labelled "Warranted genuine." The Bench dismissed the case, allowing defendant costs.

TARTARIC ACID.

At Stirling Police Court on August 5, Messrs. Wm. Low & Co., grocers, Stirling, were charged with supplying an article to Mr. John Fyfe, sanitary inspector, that was not of the nature and quality demanded. A plea of guilty was tendered, and from a statement made it appeared that Mr. Fyfe visited accused's shop and asked for $\frac{1}{2}$ lb. of tartaric acid, and on analysing the article supplied he found that it was not free or combined tartaric acid, but consisted of sulphate of soda and a little bisulphate of soda. On behalf of defendants it was stated that a mistake was made through this article being sent from Dundee, and the difference—which was slight so far as appearance went—not being noticed. Bailie Bayne said that no doubt this had been a mistake on the part of accused, and the small fine of 10s. would meet the case.

A CINCHONA PRESCRIPTION.

At the Mansion House Police Court on August 9, before Alderman Sir Joseph Savory, Messrs. D. W. Marshall & Co., Ltd., chemists, Walbrook, E.C., were summoned "for unlawfully selling on July 8 a compounded drug which was not composed of the ingredients in accordance with the demand of the purchaser, being deficient in cinchona alkaloids to the extent of 55 per cent. of the amount that should have been present." The defendants pleaded guilty. Mr. W. Hussey May, an inspector under the Sale of Food and Drugs Acts for the City, deposed to sending a boy to the company's shop with the following prescription:

Pot. iod.	...	...	...	...	5j.
Tinct. cinch.	...	...	...	...	5j.
Aq. ad	...	...	...	...	5vj.

Ft. m.

One tablespoonful in water three times a day.

The mixture when dispensed was submitted to Dr. Collingridge, medical officer of health for the City, and it was found to be 55 per cent. deficient in cinchona alkaloids. Witness paid 2s. for the mixture, though in other shops he had only paid 1s. 3d. for the same prescription. A representative of the company who attended the court explained that tincture of cinchona was purchased by them from the previous owner of the business. He could not account for the cause of the deficiency. So far as the prescription went it was accurately dispensed. The Alderman asked whether the prescription was made up in the presence of the inspector. Mr. May said it was not. He understood that the company took over this business last October. Dr. Collingridge said that for practical purposes the amount of the deficiency of alkaloids was such that the prescription was almost useless. The representative of the company said he did not agree with Dr. Collingridge on this point. The active principle in the prescription was iodide of potassium. The Alderman said it was a serious case. The public had a right to be protected in the matter of prescriptions. He imposed a fine of 40s., and 20s. 6d. costs.

County Court Cases.

JUDGMENT ORDERS AGAINST CHEMISTS.

In the City of London Court on Tuesday, before Judge Lumley Smith, K.C., Messrs. J. M. Davis & Sons, wholesale chemists, 89 Bishopsgate Street Without, E.C., sought to enforce payment of 1l. 9s. 5d. for drugs supplied to Mr. J. H. Wilson, pharmaceutical chemist, Ordnance Road, Enfield Lock. Plaintiffs said that the defendant was in a fair way of business. The Court ordered the defendant to pay 1l. a month, with committal in default.—In another case the same plaintiffs proceeded against Mr. Jeffrey Cammack, chemist and druggist, 153 Dawes Road, Fulham, for non-payment of 8l. 13s. Plaintiffs' representative said that the defendant had owed the debt for two years. Judge Lumley Smith said he did not like firms to allow their debts to run on in that way. Had they tried to levy execution before applying to have the defendant committed? Plaintiffs' representative said that they had not, because there were several other orders against the defendant. The Court ordered payment of 10s. a month, with committal in default.

Bankruptcies and Failures.

Re JOSEPH HENRY HARTLEY, High Street, Finedon, Northants, described as a Chemist.—This debtor again appeared (see C. & D., August 3, p. 210) at Northampton Bankruptcy Court on August 7, and the examination was closed.

Re RICHARD KINGSTON, Kildare and Monasterevan, Chemist. The public examinations of this bankrupt will be held at the Bankruptcy Buildings, Four Courts, Dublin, on August 27 and on September 10. The official assignee, to whom all claims and statements are to be sent, is Mr. John A. Macconchy, who may be addressed at the court.

Re RONALD GERALD GRAHAM, 93 Leadenhall Street, Patent Pill Inventor.—The public examination of this debtor was held on August 14 at the London Bankruptcy Court, before Mr. Registrar Hope, the accounts showing debts 778l. 7s. 6d. and assets nil. In the course of his evidence the debtor stated that he was a patent expert and inventor. He had also been a medical student, and had experimented in chemistry, but had not taken any degree. Among his inventions were the Vitalexa pill and a combustible sanitary towel. The debtor was examined at considerable length upon the circumstances under which he had obtained moneys in connection with the patents, and the examination was ordered to be concluded.

Re JOSEPH JAMES, late of 78 Stoke Newington Road, London, N., and formerly of 418 Stratford Road, Birmingham, Chemist and Druggist.—The first meeting of creditors in this case was held on August 9 at the London Bankruptcy Court, before Mr. W. G. Williams, Assistant Official Receiver. The debtor started business on his own account in 1882 at Caversham. He has since traded for short periods at various addresses in London and more recently at 78 Stoke Newington Road. The failure is attributed to loss on the trading and pressure by the landlord. Accounts were lodged showing debts 115l. 15s. 10d. and assets valued at 81l. 10s. 5d. In the absence of any offer the case was left in the hands of the Official Receiver to be wound up in bankruptcy, the debtor's public examination being fixed for September 24. The following are the creditors: unsecured—Noble, A. E., 58 Evering Road, Stoke Newington, 97l.; preferred—rent, 17l.

Re WILLIAM HENRY CALVERT, 94 Westgate, Rotherham, Chemist and Druggist.—The statement of affairs shows gross liabilities 432l. and a deficiency of 221l. 18s. 11d. Debtor attributes his failure to "commencing business without capital, bad trade, and heavy expenses." The Official Receiver (Mr. J. C. Clegg) remarks that the debtor (aged thirty) commenced business on his own account in April 1905, without any capital. The business had previously been carried on by Mr. S. P. Billington, with whom debtor was an assistant, and from whom debtor agreed to purchase it for 180l. On July 10 last debtor executed a deed of assignment to a trustee without consulting his creditors, and the Official Receiver is informed by the trustee that no steps have been taken by him under that deed. The greater portion of the household furniture is claimed by the debtor's mother-in-law and his sister. There is 16l. owing to a moneylender, and in addition 34l. has been advanced to debtor by relatives. The sum of 187l. 2s. 1d. is still owing to Mr. Billington in respect of the purchase of the business, and the remainder of the liabilities are all in respect of ordinary trade debts. A meeting of creditors will be held on August 21.

Re WILLIAM GEORGE WELLS, 41 Lower Stone Street, Maidstone, Chemist and Druggist.—The first meeting of creditors in this matter took place at the Official Receiver's Offices,

Maidstone, on August 14, and was followed by the public examination of the debtor at the Sessions House, Maidstone, before Mr. Registrar Englefield and the Official Receiver (Mr. R. T. Tatham). There being no special trustee appointed, the Official Receiver remains trustee of the estate. Replying to the Official Receiver, the debtor stated that the particulars he had already given at his preliminary examination (*C. & D.*, July 27, p. 112) were correct. He attributed his failure to insufficient capital and depreciation in trade. The trade of the shop had been going down very much, as there were a good many shops empty in the neighbourhood of Stone Street. He had kept on trading hoping to "pull through" all right. He had kept proper books, which showed his position. His own trade had really increased since he had been there. In 1897 he made a private arrangement with his creditors, paying a composition of 12s. 6d. in the pound. He admitted that a year ago he was about 200% to the bad; he had now valued his stock as a going concern, and not a forced sale. He did consult his creditors as to his position. He was pressed by Messrs. Baiss Bros. & Stevenson, Ltd., wholesale chemists, London, with whom he had a trading account, and they had also advanced him 50%. It was his opinion that if he had not been pressed by his creditors that he could have gone on, as his business was really a personal business among customers, particularly a prescribing business. He had had a lot of illness. Although he would not be able to continue in business in the place he was to be employed as manager. He had kept cash, day, returns, invoice, and stock-taking books, and also had made out annual balance-sheets. There was no opposition on the part of creditors, and the debtor was allowed to pass.

Gazette.

Partnerships Dissolved.

DURNO, J., and SIMPSON, P. G., Coldharbour Lane, Camberwell, S.E., under the style of Durno & Simpson, general medical practitioners.

GREEN, A., GREEN, W. H., HALL, M., and MILLINGTON, T. A., Leigh, Lancashire, under the style of Hall, Millington & Co., drysalters.

JACKSON, F., JACKSON, M., JOHNSTONE, E., and JACKSON, T., Clayton, Manchester, under the style of Thomas Jackson, chemical-manufacturers.

RIGBY, J. S., and ROBERTS, A. N., Liverpool, under the style of Rigby, Roberts & Co., chemical engineers.

RUDDOCK, W. J., and HINDMARCH, R. S., Newcastle-upon-Tyne, under the style of Ruddock & Hindmarch, general medical practitioners.

New Companies and Company News.

CLAR-ALFER, LTD.—Capital 2,000*l.*, in 1*l.* shares. Objects: To carry on the business of manufacturers and sellers of disinfectants and the like. The first subscribers are: F. G. Whitham, Oxenhope, engineer; T. C. Hammond, Horbury, engineer; H. H. B. Watson, Mirfield, chemical-manufacturer; Mrs. E. S. Watson, Mirfield; C. W. Richardson, Horbury, architect; E. V. Chambers, Liversedge, chemist; and J. Oldroyd, Heckmondwike, chemical-manufacturer. No initial public issue. The first directors are: T. C. Hammond, F. E. Whitham, and H. H. B. Watson (all permanent). T. C. Hammond is life managing director. Qualification, ten shares. Remuneration of T. C. Hammond not less than 117*l.* per annum; of other directors as fixed by the board.

R. GIBBINS & CO., LTD.—Capital 10,000*l.*, in 1*l.* shares. Objects: To acquire the business carried on at Derby and elsewhere as Richard Gibbins & Co., and to carry on the business of chemists, druggists, drysalters, oil and colour men, etc. The first subscribers are: E. Watson, Hillsboro', Duffield Road, Derby, boot-factor; R. Gibbins, Fern Bank, Uttoxeter Road, Derby, manufacturing chemist; Mrs. F. Gibbins, Fern Bank, Uttoxeter Road, Derby; Miss N. Gibbins, Fern Bank, Uttoxeter Road, Derby; E. Gibbins, Fern Bank, Uttoxeter Road, Derby, engineer; J. E. Shaw, 41 Stanley Street, Derby, manager; and C. A. Taylor, 31 Longford Street, Derby, traveller. No initial public issue. The first directors are R. Gibbins and E. Watson (both permanent). Qualification, 100 shares. Remuneration as fixed by the company.

PLINIANA MINERAL-WATER CO., LTD.—Capital 40,000*l.*, in 1*l.* shares. Objects: To acquire a concession for the sole right of taking mineral water from a spring known as Pliniana, in the Commune of Riardo, Terra di Lavoro, Italy, for a period of sixty years from April 24, 1906, and to carry on the business of bottlers and vendors of the said mineral water, dealers in

mineral salts, manufacturers and sellers of compressed tablets, etc. The first subscribers are: D. R. de Simone, 8 Guilford Street, W.C., M.D.; H. Pilet, 68 Regent Street, W., gentleman; D. G. Boriani, 16 Millman Street, W.C., M.D.; V. P. Pereira, 8 Guilford Street, W.C., physician; J. N. do Miranda, 8 Grenville Street, W.C., L.N. and S.; W. F. Yeoman, 23 Muschamp Road, East Dulwich, S.E., clerk; and T. Winter, Northcote, Sidney Road, Beckenham, clerk. No initial public issue. Registered without articles of association.

STANDARD PRODUCTS, LTD.—Capital 2,000*l.*, in 1*l.* shares. Objects: To carry on the business of manufacturers and sellers of chemical, industrial, and other preparations, dealers in salts, acids, alkalies, drugs, herbs, dyes, and proprietary articles, etc. The first subscribers are: R. Guy Shorter, Mossley, Uplands Park Avenue, Loughton, Essex, manager; S. A. Atfile, 153 Beechcroft Road, Upper Tooting, S.W., brewer; J. W. Hesketh, 13 Grove Street, Cobridge, Stoke-on-Trent, accountant; H. Shaw, Brierley, Park Lane, Congleton, Cheshire, accountant; Mrs. S. Guy Shorter, Mossley, Uplands Park Avenue, Loughton, Essex; F. J. Fornie, Beddington Corner, Mitcham, accountant; and W. A. Maer, 30 Wandsworth Bridge Road, Fulham, clerk. No initial public issue. R. G. Shorter is governing director. Qualification (except governing director, who requires none), 10*l.* Remuneration as fixed by the company. Registered office, 17 Paternoster Row, E.C.

SOCIETY OF PUBLIC ANALYSTS AND ANALYTICAL CHEMISTS.—Registered August 7, with 350 members, each liable for 1*l.* in the event of winding up. Objects: To encourage, assist, and extend the knowledge and study of analytical chemistry, adulteration, nature and composition of articles of food, drugs, and commercial products generally. The word "Limited" is omitted from the title by licence of the Board of Trade. The first subscribers are: J. White, County Offices, St. Mary's Gate, Derby, public analyst; E. W. T. Jones, 10 Victoria Street, Wolverhampton, public analyst; A. B. Hill, 14 Temple Street, Birmingham, public analyst; P. A. E. Richards, Charing Cross Hospital, Chandos Street, W.C., public analyst; A. C. Chapman, 8 Duke Street, Aldgate, E.C., public analyst; B. Dyer, 17 Great Tower Street, E.C., public analyst; E. W. Voelcker, 22 Tudor Street, E.C., public analyst; and E. J. Bevan, 4 New Court, Lincoln's Inn, W.C., public analyst. The management is vested in a Council. Registered office, 8 Duke Street, Aldgate, E.C.

MARMITE FOOD EXTRACT, LTD.—The directors announce a final dividend of 10 per cent. and a bonus of 1*s.* per share for the year ended June 30.

HENRY LAMPLOUGH, LTD.—The report for the year ended May 31 shows net profits of 2,360*l.* The directors recommend a further dividend of 2 per cent., making 4 per cent. for the year, leaving 598*l.* to be carried forward.

Recent Wills.

MR. DANIEL SUTCLIFFE, of 40 Grimshaw Park, Blackburn, oil-manufacturer, and a member of the Blackburn Board of Guardians, left estate valued at 3,429*l.* 18*s.* 4*d.* gross, with net personality 2,233*l.* 17*s.* 8*d.*

MR. EDWARD LLOYD, of Morvan, Colwyn Bay, Denbigh, chemist and druggist, who died on May 14 last, left estate of the gross value of 5,253*l.* 2*s.* 3*d.*, of which the net personality has been sworn at 3,275*l.* 9*s.* 7*d.*

MR. JOSEPH WINSPEAR BROWN, of Liphook, Hants, chemist and druggist, who died on July 12 last, intestate, aged thirty-eight, left estate valued at 295*l.* gross, and letters of administration of his estate have been granted to his widow, Mrs. Florence Brown, of Liphook.

MR. EDMUND MAGER, of 28 Carleton Road, Tufnell Park, N., blacklead and blue manufacturer and drug-grinder, of the firm of Messrs. Stephenson, Mager & Co., of Albion Street, King's Cross, who died on July 2 last, aged sixty-five, left estate of the gross value of 107,172*l.* 10*s.* 8*d.*, of which the net personality has been sworn at 87,876*l.* 3*s.* 2*d.*

ALDERMAN CHRISTOPHER KAY, of Ravenscroft Hall, Middlewich, Chester, D.L., J.P., for many years connected with the Cheshire Salt Industry, formerly a partner in the firm of Messrs. Kay & Blackwell and subsequently managing director of the Cheshire Amalgamated Salt Co. (now merged into the Salt Union), left estate of the gross value of 136,368*l.* 8*s.* 8*d.*, of which the net personality has been sworn at 118,171*l.* 0*s.* 4*d.*

THE MUTUAL BRUSH.—Two lady visitors from Lancashire were in a Torquay chemist's shop the other day. One wanted a tooth-brush, and after she had selected one her friend wished to make a similar purchase, but was prevented from doing so by the remark, "Tha needn't huy one, tha can use mine"! And so the poor chemist missed another sale.

Westminster Wisdom.

(From our Parliamentary Representative.)

CONSULAR INFORMATION.

In reply to a question, Mr. Lloyd-George, President of the Board of Trade, stated in the House of Commons last week that the question of the appointment of consular or commercial agents to the self-governing Colonies is still under consideration. The information obtained will be dealt with in the same way as that obtained by British consuls—some being treated as confidential and the rest being published.

EMPLOYERS' LIABILITY (INSURANCE COMPANIES) BILL.

The second reading of this Bill took place last week. The object of the Bill is to retard the growth and development of "mushroom" companies by requiring that all companies undertaking employers' liability insurance shall deposit 20,000*l.*, as is done at present in the case of life insurance companies. Mr. Kearley stated that in the Committee stage amendments will be introduced making the deposit apply only to future companies. The Bill has since reached the Committee stage.

PHARMACEUTICAL SOCIETY OF IRELAND.

The Order in Council approving of a regulation made by the Pharmaceutical Society of Ireland was laid on the table of the House of Commons on August 8, and referred to the alterations made in the award of marks for the Licence examination. After reciting the reason for the procedure in the usual display of verbosity, the following schedule is given :

That the following be added to Pharmaceutical Licence Examination Regulation VII.: A candidate who obtains 70 per cent. of the total marks and not less than 50 per cent. in each subject shall be awarded a pass with honours.

OPIMUM IN MALAY STATES.

Lord Elgin received a deputation at the Colonial Office on August 14, to urge that restrictions should be imposed on the opium trade. The deputation voiced the views of a conference held at Ipoh, Perak, by delegates from the anti-opium societies of Singapore, Penang, Selangor, and Malacca. The conference urged the compulsory registration of all opium smokers by a certain date, and that after that date no further persons should be registered as opium smokers. The proceedings were private. Dr. R. M. Connolly, the leader of the anti-opium movement in the Malay States, expressed the views of the Chinese and non-official Europeans on the question.

COMMERCIAL INTELLIGENCE.

Mr. Harold Cox asked the President of the Board of Trade who were the members of the Board of Trade Consultative Commercial Intelligence Committee, what manufacturing or trading firms they represented, and by whom they were selected. Mr. Lloyd-George replied that the twenty-five members of the Commercial Intelligence Committee included, besides himself as Chairman, seven officials representing the Board of Trade, Foreign Office, Colonial Office, and India Office; four representatives of the great self-governing Colonies—Canada, Australia, New Zealand, and South Africa; and thirteen members appointed by the Board of Trade in consultation with the Association of Chambers of Commerce. The latter were Lord Avebury, Mr. F. Britton (ex-President of the Sheffield Chamber of Commerce), Mr. T. Craig Brown (South of Scotland Chamber of Commerce), Sir W. Holland, M.P., Sir A. Rollit, Sir Frank Forbes Adair (ex-President of the Manchester Chamber of Commerce), Sir Hugh Bell, Mr. W. H. Mitchell (President of the Bradford Chamber of Commerce), Mr. R. Thompson (Belfast Chamber of Commerce), Mr. D. A. Thomas, M.P., Mr. E. Parkes, M.P., Mr. G. H. Cox (Liverpool Chamber of Commerce), and there was a vacancy occasioned by the death of Mr. T. F. Blackwell.

PATENTS AND DESIGNS BILL.

This Bill as amended in Standing Committee was considered in the House of Commons on Friday evening. Mr. Lloyd-George moved two new clauses; one giving to a defendant in an action for infringement a power to counterclaim for the revocation of the patent, and the other relating

to rules as to applications for registration of designs, which were added to the Bill. Mr. Dundas White moved a new clause by which patentees are required to mark their articles with the word "patent," and the year and number of the patent. During the discussion Lord R. Cecil expressed the opinion that chemical materials could not be stamped as required by the proposed clause, but Mr. Lloyd-George said the marking could be on the bag or tin, as is often done at present. Lord Robert Cecil protested that the bag is split up and the substance sold in small quantities, and Lord Balcarras instanced flour as another article that could only be marked in the gross. The clause, with a reservation as to verbal alterations, was added to the Bill. Some discussion then took place as to revocation of patents not worked in this country, but Mr. Lloyd-George said the revocation clause was the pith of the Bill, and he referred to the large number of blocking patents with which the register is encumbered. Mr. Lloyd-George also ably defended the clause which prohibits sale conditions of patented articles showing that the present practice is an abuse of the monopoly granted to a patentee. The third reading took place on August 13, and this Bill, with the Patents and Designs (Consolidation) Bill, reached the House of Lords and were read the first time on August 14.

Summer Outings.

Dewsbury's Excursion.

It being the holiday season, only a small party of members assembled on August 13 in response to the invitation of the President of the Dewsbury Chemists' Association to accompany him to Grange Ash. Going by tram to Thornhill, from there a pleasant walk of three or four miles through lanes and fields brought the party to their destination. They were photographed by Councillor Taylor, of Morley, and then, after a substantial tea, cricket was indulged in till dusk set in. The outing was enjoyable, the only regret being that so few turned up to enjoy Mr. John Day's hospitality, for which he was duly thanked, on the proposition of Mr. Pickard (Ossett).

Cardiff Picnic.

THE second summer picnic of the Cardiff Pharmaceutical Association took place on August 14. The members, with a few friends, to the number of twenty-seven, took train at the Great Western Station for Porthcawl, a popular seaside resort a few miles from Bridgend. A saloon-carriage was provided for the party, and the journey was rendered more than usually pleasant by the efforts of the President (Mr. M. Mumford), the Vice-President (Mr. Reynolds), and the Secretary (Mr. Jenkins), who instituted a variety of games, in which all took part. Unfortunately, almost as soon as the party arrived at their destination, rain commenced to fall, and a projected walk over the commons and the sands had to be abruptly curtailed. Tea was provided at Comley's Restaurant, and there the remainder of the time had to be passed. A whist-drive was arranged, and, notwithstanding the unfavourable weather, the time passed pleasantly until the time arrived for the departure for Cardiff, which was reached about nine o'clock.

"British Brushes" at Brighton.

THE men of Kent invaded Sussex on Saturday, August 10, the occasion being the annual banquet of the celebrated brush-house, Messrs. G. B. Kent & Sons, Ltd., Farringdon Road, E.C., Victoria Park, E., and Apsley. Some 120 of the male employes took part in the proceedings, arriving at Brighton by an early train, and by 1 p.m. they felt equal to the task of demolishing the substantial viands spread before them at the Old Ship Hotel. At the conclusion of the meal the Chairman (Mr. Ernest N. Kent), who was supported by Mr. A. Barton Kent and Mr. C. F. Barrett, proposed the toast of "The King and Queen," which was accorded musical honours. The toast of "The Limited Company," coupled with that of "The Directors," was entrusted to Mr. Cholmondeley Wood (an old favourite on these occasions), who in an eloquent and graceful speech alluded to the cordial and pleasant relations which continued to exist between the employers and employed. He

considered that the three essentials in any business-house were prestige, reputation, and progress, and these the firm of Kent had fully merited, as instanced by the remarkable success they had met with in the development of the business on modern commercial lines. Mr. A. Barton Kent, in responding, said that in spite of keen competition orders for "Best British Brushes" continued to pour in from all parts of the world, and that their trade was a steadily increasing one. Especially was this the case with their new country factory, where they were beginning to feel the effects of a boom. It would interest them all to know they had recently established a "record" in an exceedingly short space of time, having received orders for a thousand gross of tooth-brushes in one week. He only wished this was a weekly occurrence. (Cheers.) It was his pleasant duty to thank the employés for their loyal support and co-operation during the past year. The toast of "The Employés" was next given from the chair, it being mentioned incidentally that the company was now paying more wages per week than at any other period of its foundation, which dated back 130 years (1777-1907). He sincerely hoped the wages-bill would continue to increase. (Cheers.) The directors attributed their success not only to their workpeople, but also to the individual efforts of their journeymen and staff in giving their best endeavours towards manufacturing a thoroughly satisfactory article. Mr. J. C. Vincent and Mr. J. Humphries replied, after which the Chairman proposed "The Harold Benevolent Society," to which Mr. W. H. Servant responded, giving a few details of this excellent sick fund and benefit society. Other toasts included "The Visitors," and Mr. C. F. Barrett proposed the health of "The Travellers," to which Messrs. Tinley, O'Donnell, Wrightson, and Nash responded. The weather was glorious, and the excellent arrangements made by the stewards—Mr. H. G. Benwell and Mr. J. C. Vincent—added much to the day's enjoyment.

Photographic Notes.

By PHARMACEUTICAL CAMERIST.

Another Platinum-deposit.

THERE is news to hand of the discovery of another deposit of platinum, which, if true, should influence prices. The new deposit is in the Ural Mountains, about five miles from the gold-mines on the banks of the River Shumich. Laffan's St. Petersburg correspondent says that the platinum is readily recovered from the sand in the district—so easily, indeed, that poachers with primitive apparatus have been making an average of 20% a month. This is the second platinum-deposit discovered within the last few months, so that, pending developments, it will be just as well to continue to buy platinum photographic materials sparingly.

Treatment of Bichromate Sores.

THE painful sores produced on some skins by chromium compounds have always been difficult to cure, and Dr. Riederer, in a paper read before the Society of Chemical Industry in New York recently, advocated the use of a 5-per-cent. solution of sodium bisulphite as a curative dressing. He states that nine months' experience of the treatment had completely demonstrated its efficacy, and that it is now customary in the chrome-works to provide a solution of sodium bisulphite for the use of the workmen for washing after work. I have heard it stated on several occasions that persons subject to bichromate-poisoning are always immune from that other troublesome photographic skin-disease metol-sore, and *vice versa*.

Three-colour Photo-micrography.

DR. NORMAN'S lecture (read the other week by Dr. Evershed before the South London Photographic Society) was very interesting to me as a chemist, inasmuch as I am frequently called upon by amateurs for advice on photo-micrographic work. I abstract the following points as likely to interest other pharmaceutical camerists. To ensure freedom from vibration Dr. Norman stands his apparatus on indiarubber washers placed on a bench having its legs

resting in wooden cups packed with felt. The light he uses is oxy-hydrogen limelight with a blow-through jet. For low-power work a Zeiss Planar lens is used, while for high-power Dr. Norman employs an apochromatic objective. For three-colour the Sanger-Shepherd process, using dyed lantern-slides, is found satisfactory.

Removing Silver Stains.

REFERRING to the note in this column on June 15 (p. 907), Mr. H. Hunter, Whitehaven, calls attention to a remedy which he has found effectual. The note, which appeared in "Focus," is as follows:

Immerse the negative in a solution of potassium iodide 20 grains to water 1 oz. for ten minutes, rinse thoroughly, and transfer to solution of potassium cyanide (30 grains to 1 oz.). Rub the stains gently with a tuft of cotton-wool soaked in the solution until they disappear, when the negative should be rinsed again thoroughly and dried.

Mr. Hunter backs up his opinion of this remedy by sending a badly stained negative partly cleared as here suggested. The Ilford "Every Day Book" states that silver stains cannot be removed, so that this contribution may be useful to photographic chemists; it is also simpler than the method I gave in June.

Demachy's Oil Prints.

THE master of "controlled" photography has given an exhibition of his oil-printing works at the house of the Royal Photographic Society. It was a wonderful show in every respect. Demachy's figure-studies are a revelation, and demonstrate alike the artistic feeling of the author and the amount of control which the process is capable of giving. The possibilities of the method were still further emphasised in those instances where a "straight" bromide print from the same negative was hung below the oil print, although, of course, some allowance must be made for the different qualities of the negatives demanded by the two processes.

Autochrome Formulae.

THE following are the recipes referred to on p. 303, which have been translated from the French directions sent out with the new Lumière autochrome plates. The solutions are used at a temperature between 15° to 18° C.:

First Developer.

A.	Pyrogallie acid	...	...	3 grams
	Alcohol	...	...	100 c.c.
B.	Potassium bromide	...	...	3 grams
	Ammonia (0.92°)	...	...	15 c.c.
	Water	...	...	85 c.c.

Reversing Solution.

C.	Potassium permanganate	...	2 grams
	Sulphuric acid	...	10 c.c.
	Water	...	1,000 c.c.

Second Developer.

D.	Anhydrous sodium sulphite	...	15 grams
	Diamidophenol	...	5 grams
	Distilled water	...	1,000 c.c.

Oxidising Solution.

E.	Solution C.	...	20 c.c.
	Water	...	1,000 c.c.

Intensifying Solution.

F.	Pyrogallie acid	...	3 grams
	Citric acid	...	3 grams
	Water	...	1,000 c.c.
G.	Silver nitrate	...	5 grams
	Distilled water	...	100 c.c.

Clearing Solution.

H.	Potassium permanganate	...	1 gram
	Water	...	1,000 c.c.

Fixing Solution.

I.	Sodium hyposulphite	...	150 grams
	Sodium bisulphite (commercial solution)	...	50 c.c.
	Water	...	1,000 c.c.

Varnish.

J.	Dammar gum	...	20 grams
	Pure benzine	...	100 grams

Scientific Progress.

Temperatures under this heading are on the Centigrade scale.

Pilocarpine Adulterant.—M. A. Langrand, at the meeting of the Paris Society of Pharmacy on July 3 ("Journ. de Pharmacie et de Chimie") called attention to a new adulterant he had discovered in a specimen of pilocarpine hydrochloride. The adulterant proved to be sulphonal, and was present to the extent of 25 per cent. The wholesale house was unable to offer an explanation of the presence of sulphonal.

Ash of Kamala.—R. L. Schultz communicates a long article to the "Phar. Rev.," 1906, 129, on this subject. Pure kamala yields from 1 to 3 per cent. of ash, but it is notorious that commercial samples sometimes yield 50 per cent., or even more. Schultz has found from 20 to 30 per cent. The chief interest of the communication is the exhaustive bibliography of the subject, all important papers published since 1855 being epitomised.

Calmatambin is the name of the new glucoside which Mr. F. L. Pyman has isolated from the bark of a tree indigenous to West Africa, which is known to the natives as *Calmatamba*, and is probably identical with *Canthium glabrifolium*. The glucoside has the formula $C_{20}H_{30}O_{15} \cdot 2H_2O$, and crystallises in needles melting at 100° . The anhydrous substance melts at $144-145^\circ$. It contains one methoxyl group, has $[\alpha]_D^{20} -130.4^\circ$, and occurs in the bark to the amount of 1.1 per cent. It is readily hydrolysed by dilute acids and by emulsin. The research ("Proc. Chem. Soc.," p. 183) shows that it is a β -glucoside, having the constitution represented by the formula $CH_3O.C_6H_4.O.(OH)_4.O.C_6H_4.O.$ Calmatambin is devoid of any appreciable physiological action.

A New Constant for Oils.—Messrs. Louise and Sauvage describe in a recent number of the "Comptes Rendus" (1907, 145, 183) a new method for distinguishing fixed oils which they think will serve as a basis for the detection of sophistication in certain cases. To take a typical instance, when 40 grams of colza oil are mixed with 80 c.c. of acetone two layers are formed. The upper layer contains the following quantities of oil per gram: 0.095 at 0° , 0.128 at 7.5° and 0.185 at 12.5° , while the lower contains 0.6425, 0.572 and 0.520 per gram at the same temperatures. At 15.4° the two layers merge into each other and form a limpid liquid. The temperature at which the two layers mix appears to be a constant for each oil and it is proposed to call it the "critical temperature of the oil."

"Pyretol."—To the "Journal of the Pharmaceutical Society of Japan" Mr. S. Sato gives the results of his determination of the active principle of a chrysanthemum from which insect-powder is prepared. In 1905 Mr. Sato found the active principle to be a non-volatile resinous substance of an acid character. Since then he has succeeded in purifying the resin, and now describes it as a light yellow, clear, odourless, syrupy liquid. At first it appears tasteless, but after some time its effects are felt on the tongue. It is insoluble in water and dilute acids, but is soluble in alcoholic ether and petroleum ether. The freshly prepared solution is neutral, but gradually increases in acidity as it is kept. The resin is also soluble in warm caustic alkali, and treated with acids it loses its efficacy. It contains no adhesive matter, and with Liebermann's test the resin turns first a dark violet and then brown; with Hesse's test it becomes deep red. Mr. Sato, who proposes to call the substance "Pyretol," is proceeding with his investigations.

Adulteration of Sandalwood Oil.—*A propos* of the paper by Parry and Bennett in the *C. & D.* of July 6, it may be remembered that Dohme and Engelhardt, in a communication to the American Pharmaceutical Association (*C. & D.*, 1906, II., 437), stated that, as a result of their experiments, the optical rotation, the acid value, and the ester value are of little use in judging the quality of a sandalwood oil. Schimmel & Co. have discussed this paper, and say, "contrary to Dohme and Engelhardt, we consider the optical rotation and also the acid and ester numbers very useful in judging the oil; the rotation, particularly, supplies frequently information as to whether, and with what substance, an oil is adulterated." It is undoubtedly the fact that at times pure oils are obtained with abnormal rotations, and samples drawn by English distillers of the best repute have from time to time been found with optical rotations of -12° to -16° . But these are few and far between and are probably from old wood, and can always be bulked with normal oils to answer all pharmacopoeial tests.

Ibogaine.— $C_{17}H_{19}N_3O_2$. An alkaloid recently obtained from the iboga (*syn.* aboua, or obouete or liboka) (*N.O.* Acanthaceae *Tabernaemia iboga*, Baill., a plant growing in West Africa, particularly the Congo. In certain districts it is rare and commands a high value. The blacks claim exciting and aphrodisiac properties for it. It has also strong sustaining powers. Too large a dose may produce tetanus and convulsions. The plant has been used with some success in sleeping-sickness

Ibogaine is extracted by making a mash of the powdered root with milk of lime, drying, extracting with ether, and subsequently treating that extractive with 10 per cent. sulphuric acid. The alkaloid and its salts taste somewhat like cocaine. The base is soluble 1 in 23 alcohol 95 per cent. at 15° C. Insoluble in water. Melting-point 151° C. Its solutions are laevorotatory. In solution the substance oxidises, but keeps well in crystalline form. As an anæsthetic ibogaine does not seem equal to cocaine or stovaine, but is a good stimulant of the central nervous system in small doses. It exercises a very strong action on nutrition, augmenting respiratory changes, and the processes of assimilation and rejection. It is a muscular tonic, notably a nerve-tonic and a heart-tonic. *Ibogaine hydrochloride* occurs in white crystalline scales, soluble 1 in 50 water at 15° C., 1 in 1.5 alcohol 95 per cent. at 20° C. Solutions 1 in 50 will crystallise out in the winter. The alkaloid would appear to be valuable in all cases in which, following on an infectious disease, or owing to malnutrition, the patient suffers from nervous depression—in la grippe, angina, and heart-afections generally. Dose of ibogaine hydrochlor. 0.01 to 0.03 gram ($\frac{1}{10}$ to $\frac{1}{20}$ grain). (Abstract from original paper by Dr. Albert Landrin.)

Prescription Problem.

In the *C. & D.*, August 3, p. 207, we gave a French prescription for transcription and translation. The following are the French and English renderings:

Calomel	...	...	...	0.15 cent.
Sucre pulvérisé	...	...	...	q.s.

En deux paquets.

Les donner à un quart d'heure d'intervalle.

Vaseline boriquée et mentholée	20 gr.
--------------------------------	--------

En mettre la grosseur d'un petit pois dans le nez.

Bromure potassium	...	...	1 gr.
Antipyrine	...	...	0.25 cgr.
Sirop f. d'oranger	...	...	40 gr.
Eau de tilleul	...	...	90 gr.

Une cuillerée à dessert chaque heure.

Translation.

Calomel	...	...	15 centigrams
Powdered sugar	...	...	a sufficiency

In two packets.

Give them with a quarter of an hour's interval.

Boricated and mentholised vaseline 20 grams

Place a piece the size of a small pea into the nose.

Bromide [of] potassium	...	...	1 gram
Antipyrin	...	...	25 centigrams
Syrup of orange-flowers	...	...	40 grams
Lime-flower water	...	...	90 grams

A dessertspoonful every hour.

A good response was obtained, the postcard solutions coming not only from the United Kingdom, but from the following towns on the Continent: Adelboden, Bruges, Brussels, Courtrai, Geneva, Grenoble, Lille, Ostend, Paris, Pau, Romont, Rotterdam, Szemolnok, Vevay, Wiesbaden, Zürich. The chief difficulty in the prescription was in the directions of the mixture. The transcription we give was supplied us by the Cairo pharmacist who consulted the prescriber. We are sorry to announce that not one of the competitors has given the correct solution, although several come very near. One or two state that the last part of the mixture directions is undecipherable, and one competitor states that he would in this case have labelled the bottle "Prendre selon avis." The following are some of the renderings of the hieroglyphics which come after the words: "Une cuillerée à dessert":

entre les repas	matin et soir
après les repas	d'heure en heure
avant chaque repas	de 2 en 2 heures
essayer	par 2 heures
assez de vin	chaque 2 heures
dans un verre de vin	toutes des heures
dans un quart de verre d'eau	tous les quatre heures
un verre d'eau	en cas de crise
assez souvent	en se couchant
soir et matin	

We are sorry not to be able to make awards, especially as some of the cards are beautifully written. One competitor has added in a third column the German equivalent of the prescription, thus converting his card into a polyglot solution. The prescription is a useful exercise for apprentices and assistants to practise reading foreign script.

Observations and Reflections.

By XRAYSER.

The Examination Figures

given in the first editorial last week are a valuable compilation, irrespective of the deductions that may be inferred from them. That our rulers have rather overreached themselves in their endeavour to place our trade alongside the learned professions by means of the preliminary test of general education is made obvious by the results of the past six years; and presumably the new by-laws are a recognition of this mistake. The shortage of qualified assistants will have to become much more pronounced, however, before any general alarm arises, but it certainly is curious how the provision of candidates for the Minor keeps up in view of the decline in Preliminary passes. I note the explanation that we are drawing on the reserve of the years before 1901, and there can be no other source from which the candidates can have been obtained. But it would hardly have been guessed that such an abundant reserve existed. In the six years 1901-6 there were 1,131 Preliminary registrations and 3,000 Minor passes, and, as all registered for the Preliminary do not pass the Minor, some 2,000 of those who did, and another 2,000 of those who tried but failed, must have been drawn from the students registered before 1901. This is really astonishing. It is interesting to compare with the figures given those of

The Annual Registers.

From these it appears that the number of qualified chemists and druggists reached the highest point at the end of 1905, when it was 15,948, and it was only five short of that number at the end of 1906. The total slowly advanced from 15,000 to 16,000 between 1895 and 1906. The first official register, issued early in 1869, gave the names of 11,638 persons, a considerable proportion of whom we should now hardly call chemists and druggists. But counting them all, and comparing them with the population of Great Britain at that time, it will be found that to each registered chemist 2,240 Britishers were apportioned on the average. For a while chemists increased faster in ratio than the population, so that in 1881 the proportion was only 1 to 2,207. Since then population has gone ahead, and taking the Registrar-General's estimate for 1906 it appears that now every chemist may reckon on a *clientèle* of 2,434. But that means every chemist on the register, and of these many are abroad, a large number are assistants, and a further considerable residue do not own businesses. Probably the proportion of public for chemists' shops would be nearer 4,000 than 3,000. Moreover, it is common knowledge that the number of chemists' shops is actually, not relatively, declining; stores are eating them up; and even assuming that all the stores carry on business in the spirit of the Pharmacy Act, it is obvious that they do not require so many qualified assistants as would have been necessary if the individual system of trading had continued unchecked. If, say, a store does as much drug-trade as three shops which it has replaced, the poison part of that business can no doubt be conducted by one qualified person; under the old *régime* three would have been required.

The Educational Number

testifies to the intellectual labour involved in acquiring a statutory competence in pharmacy, not to mention the money cost. It is gratifying to one's self-esteem to have some difficulties of this character to overcome, but it is at the same time somewhat depressing to remember that not fewer than a couple of thousand youths

whose natural inclination is towards the cricket-field just now, have been studying those pages during the past few days with anxiety, if not with dismay. It would be a generous estimate to reckon that a hundred of them are attacking the formidable-looking programme with real enjoyment. There are a few such, and they will come to sit on the platform at the Conference meetings. The others who grind through the six subjects as a necessary duty are all the more heroic. Perhaps they will thank Mr. S. A. Warner, of Swindon, one day for those "diagrammatic analyses of the Minor examination syllabus" on pp. 275-6, but for the moment he must be content with curses not loud but deep. The effect of those crowded placards on a sensitive mind is apparently not sufficiently realised by the writer who suggests that they should be copied out on quarto paper, pasted on cards, and hung in the study, which is probably the bedroom. Those cards would not go far as soporifics. They indicate some five hundred subjects to be mastered, on any one of which questions may be asked. Fortunately the mind almost unconsciously assimilates unlimited supplies of information if these come in the way of its daily occupations. Readers of Mark Twain's account of his apprenticeship to piloting on the Mississippi will recollect how he was staggered at first when he was told of the endless snags and turns and currents which he would have to learn and remember. How was he to do it? he asked. "I dunno how," said his instructor, "but you got to." And somehow the knowledge came.

The Atom Controversy

was of itself sufficient to make the Leicester meeting of the British Association memorable. There are not many scientists whose experiments would justify them in taking part in such a discussion, and about half of those who were so qualified were on the platform on this occasion. But it is not easy for common people to make out even the drift of the speeches so far as they have been reported. The "Times" may be right in suggesting that radium is not an element if it decomposes into helium and neon; but the question is whether these separate from it, or whether it changes into them. More wonderful still is the hint that the radium emanation may act like the old powder of projection and convert copper into lithium. It is a real comfort to many people to find Lord Kelvin standing so staunchly by the atom. Professor Rutherford, too, declares that the work of the last ten years has enormously strengthened the atomic theory. It is doubtful, as the "Times" says, whether these authorities use words in the same sense as some of us understand them, for every now and again we find them agreeing with the hypothesis but dismissing the atom itself as an absurdity. Professor Smithells, President of the Chemistry Section, opportunely quotes Faraday, who, in reply to an inquiry as to his view of the atomic theory, said he did not think he was unorthodox; he believed he believed in matter and its atoms, but he could form no idea of them apart from their forces, and the conception of them rather embarrassed than helped him. And yet the Professor thinks that "few will deny that the atomic theory stands to-day as an indispensable instrument for productive chemical work; it has neither had its day nor ceased to be."

MARRYAT'S "THERAPEUTICS."—This domestic medical guide was published by Dr. Thomas Marryat, who was born in 1730 and died in 1792, and was a popular book with our forefathers, as may be judged from the number of editions which it passed through. In the edition which Mr. B. A. Rogerson, Bradford, sends for our inspection there is a supplement giving recipes for Daffy's elixir, Scotch pills, Turlington's balsam, and Huxham's tincture of bark.

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Editorial Comments.

Photography in Colours.

So often have processes of photography in colours been announced and turned out to be tedious failures that one is chary of taking such statements seriously. Up to now such methods have usually consisted in taking three separate screen negatives, dyeing each of the finished prints in its own special colour and uniting the triple photograph into one picture. The difficulties have been in procuring suitably corrected screens, in producing negatives with the necessary balance of density, and in accurately registering the three prints. The processes have always been tedious and uncertain. Some time ago we gave an abstract of a patent taken out in 1904 by Messrs. Lumière, of Lyons, in which a new principle was involved, and it now appears that with these plates which are known as the "autochrome" plates it is possible to take by an ordinary exposure in the camera, and by subsequent simple manipulations, to obtain a direct positive in colours. Photographic experts pronounce the colour rendering to be better than any hitherto obtained by triple processes. It should be stated that the dream of colour photography chemically produced is still unrealised. The Lippmann interference photographs are, perhaps, the nearest to real colour photographs, but the process has proved a failure in practice. As no chemical is at present known that gives different coloured salts to various coloured light the chemical solution of the problem does not seem possible. It is not, however, safe to make the dogmatic assertion that such a process will not be discovered. In the new Lumière plates based on the older three-colour processes a distinct advance has been made. Starch grains are separately dyed with transparent colours—red, yellow, and blue—and then mixed in certain definite proportions. The combined starch grains are next dusted on to a plate coated with pitchy matter, the layer being then covered with more pitchy matter, another layer of starch granules, and varnish. On this basis an orthochromatic sensitive emulsion is spread. The plate is exposed through the glass side, a black card being supplied to put over the film to protect it from the springs usually found in dark slides. Exposure is made through a dark yellow screen which the inventors supply, as they say that false colour renderings would be obtained unless the screen is true. The plates, which do not show colour when looked through, are relatively slow. The fact that the plates are exposed through the glass side has to be allowed for in the focus when using them in the ordinary

dark slide, where the position of the dry plate is exactly that occupied by the ground glass. In regard to development, as the plates are sensitive to red the dish is covered and the time of the operation regulated by a sand-glass or other timing device. The developer is ammonia-pyro, containing a good proportion of alcohol, and development should be complete in two and a half minutes. The plate is next washed for a few seconds, and then in daylight the image is reversed by immersing the plate (1) in an acid permanganate bath, when the colour shows itself; (2) in a re-developer; (3) in a intensifying bath; (4) in a cleaning-bath; (5) fixing; and (6) varnishing. The operations from developing to the varnishing-stage occupy about twenty minutes. The plates are not yet obtainable in this country, but the makers tell us they will be able to supply in about a month. In another column we give the necessary formulæ from the French directions sent out by Messrs. Lumière, so that photographic-chemists will be able to meet promptly the demand for the solutions required when using these interesting new plates.

The New Australian Tariff.

THE commercial world has been startled this week by the publication of a new Australian tariff of a highly protectionist character, involving many important alterations of interest to the drug and chemical trades. The new tariff was submitted to the Australian Federal Parliament by Sir William Lyne on August 8, and is already in force. Any amendments of the duties that are subsequently made will be readjusted at the time goods are imported. The new Bill evidently embodies the proposals of the Tariff Commission which recently concluded its sittings in Melbourne after being in existence for two years. It gives Great Britain a preferential duty varying from 5 per cent. upwards according to the extent of British competition in the article taxed, it being estimated that the tariff (based on the method of calculation adopted in Canada) represents an average preference of 44 per cent. to British producers and manufacturers on the goods which have been selected for preference. Cabled reports have been received in London showing the principal items embraced in the Bill, with the amount of duty payable under the general tariff and the amount payable under the British tariff. The table on the opposite column gives the items of interest to our readers.

It will be noticed that Great Britain gets $\frac{1}{4}d.$ per lb. duty on cocoa, chocolate, and similar articles, but formerly the duty was $1d.$ per lb., so that even against Great Britain an additional 100 per cent. to 150 per cent. has been added. Confectionery generally is increased from $2d.$ to $3\frac{1}{2}d.$ per lb., and a new penny duty is placed on each packet of tea. Arrowroot is advanced from $2s. 6d.$ to $8s. 4d.$ per cwt., and salt now pays $20s.$ a ton, against $12s. 6d.$ formerly. It will be noticed that the duties on "certain drugs and chemicals" show a preference of 5 per cent. in favour of Great Britain, but no information is yet available as to what items this refers to. It is quite probable that 5 per cent. to 10 per cent. has been added to the British duties already existing on these items before the preference is granted. Formerly perfumery paid 20 per cent. *ad val.*, but the duty is now 25 per cent. on British perfumery, while foreign will pay 35 per cent. This preference of 10 per cent. will surely enable Great Britain to secure practically all the trade. We may call attention to the fact that out of $56,513l.$ worth of perfumery imported into the Commonwealth in 1905 (the latest figures available) $31,864l.$ was obtained from the United Kingdom, $10,413l.$ from the United States, $7,773l.$

	General Tariff	British Tariff
Paraffin candles per lb.	$2\frac{1}{2}d.$	$2l.$
Other makes "	$1\frac{1}{2}d.$	$1l.$
Confectionery—		
Cocoa and chocolate prepared for edible use or potable use (not in powdered form), etc. per lb.	$3\frac{3}{4}d.$	$3\frac{1}{2}d.$
Cocoa and chocolate for potable use in powdered form per lb.	$2\frac{1}{4}d.$	$2d.$
Milk—Preserved and sweetened per lb.	$2\frac{1}{4}d.$	$2d.$
Oilmen's stores—		
Groceries and other preparations used in the household	20 per cent.	15 per cent.
Pickles, sauces, chutney, olives, and capers in quarter pints per doz.	$7\frac{1}{2}d.$	$6d.$
In half-pints	$1s. 3d.$	$1s.$
In pints	$2s. 6d.$	$2s.$
In quarts	$5s.$	$4s.$
Exceeding a quart ...	$1s. 8d.$	$1s. 4d.$
Manufactured curry ...	35 per cent.	25 per cent.
Starch and dextrin ... per lb.	$2\frac{1}{2}d.$	$2d.$
Starch flours	$2\frac{1}{2}d.$	$2d.$
Paints and colours ground in liquid per cwt.	$4s. 6d.$	$4s.$
Prepared	$6s. 9d.$ or $25 p.c.$	$6s.$ or $20 p.c.$
Colours, dry	$3s. 3d.$	$3s.$
Dry white-lead, patent dryers, etc. per cwt.	$2s. 3d.$	$2s.$
Blocks, artist's colour dyes, dry or in paste, in bulk for manufacturing purposes ...	5 per cent.	Free
Glassware, not elsewhere included	35 per cent.	25 per cent.
Bottles, etc., empty, including packing, measuring outside the package, as imported up to 10 oz. fluid capacity per cubic ft.	$2s.$	$1s.$ and $9 p.c.$
Over 10 oz.	$1s. 1d.$	$1s.$
Bottles, etc., whether the contents are dutiable or not, up to 2 oz. fluid capacity per doz.	$1s. 1d.$	$1s.$
Over 2 oz.	$10d.$	$9d.$
Glue, gelatin, and cements, not elsewhere included ...	40 per cent.	30 per cent.
Certain drugs and chemicals ...	25 per cent.	20 per cent.
Perfumery	35 per cent.	25 per cent.
Cameras, magic or optical lanterns, and the like ...	35 per cent.	25 per cent.
Photographic accessories of rubber, not integral parts of cameras	30 per cent.	20 per cent.
Photographic dry-plates and negatives, prepared plates for engravers and lithographers ...	5 per cent.	Free
Surgical and dental and veterinary instruments and appliances, "not being furniture"	10 per cent.	Free

from Germany, and $2,333l.$ from France. Table waters are now to pay 25 per cent. *ad val.*, instead of 20 per cent. Cameras formerly paid 20 per cent., but the duty is now 25 per cent. for British goods, and 35 per cent. for the foreigner. Surgical, dental, and veterinary instruments are still on the free list, and a preference of 10 per cent. is given to Great Britain. In 1905 surgical instruments to the value of $67,000l.$ were imported into the Commonwealth, of which $37,400l.$ worth was obtained from Great Britain and $19,400l.$ from the United States. So far as can be judged, the preference accorded to Great Britain will lead to increased trade for this country; but it must not be forgotten that practically in every case where preference has been given the protective duty has first of all been increased, and that the high duties will lead to the establishment of local factories. In other words, it shows that the feeling in Australia is still in favour of high protective tariffs, but that the desire is to give us a slight preference as against the foreigner.

Our Foreign Trade.

THE feature of the Board of Trade Returns for July is the enormous increase in the exports of British goods, the figures easily beating the previous records of 1907. This increase amounts to no less than 7,009,369% more than in July 1906. Imports, too, show the satisfactory increase of 3,605,500%, chiefly in raw materials. The following table shows the increases in each section of our foreign trade for the past two years :

	July £	Over 1906 £	Over 1905 £
Imports ...	52,213,300	3,605,500	7,471,269
British exports ...	40,452,300	7,009,360	12,631,280
Re-exports ...	7,388,300	1,308,900	1,614,800
Total ...	100,053,900	11,923,760	21,717,349

The figures for the seven months of the current year, however, afford a more adequate comparison as to the unprecedented trade boom, showing the remarkable fact that the increase in British exports during the seven months' period of 1906 exceeded the increase in total imports. They are as follows :

	Jan.-July £	Over 1906 £	Over 1905 £
Imports ...	380,562,000	31,428,300	62,717,200
British exports ...	246,769,800	32,733,200	63,242,500
Re-exports ...	58,937,500	8,459,300	13,109,700
Total ...	686,269,300	72,620,800	139,069,400

The chief features of interest in the July imports were the increase of 720,000% in the food bill and one of 707,000% in foreign manufactured goods. But by far the greater increase was in raw materials pure and simple. Oils, oil-seeds, gums, etc., show a remarkable advance of 841,000%, of which petroleum accounts for 157,000%, representing an increased quantity of over seven million gallons, while turpentine was 22,000 cwt. more. Gum arabic was 9,000 cwt. up, as was shell and other lac by 5,000 cwt.; tallow was 125,000% higher. Chemicals, drugs, dyes, and colours (972,815%) were 129,430% more, a remarkable feature being a substantial decline in brimstone from 87,823 cwt. to 35,417 cwt. This is probably in anticipation of a reduction in prices for Sicilian brimstone, as it is well known the production is becoming unwieldy, as a result of the closing of the American market and the existence of the large stock taken over from the Anglo-Sicilian Co. Bleaching materials, boron compounds, saltpetre, sulphuric acid, and tartaric acid show less imports, while coal products (not dyes), cream of tartar, glycerin, soda compounds, drugs and medicines (especially quinine), dye-stuffs, and painters' colours are all on the up grade. Exports of "chemicals, drugs, dyes, and colours" during July were 1,363,942%, or 170,566% more. The bulk of the items reveal increased quantities, unenumerated drugs and medicines being 158,839%, against 132,805% in July 1906. Quinine is down by 37,522 oz., representing a value of 1,562%. Improved quantities are noted in coal products (not dyes), dye-stuffs, glycerin, chemical manures, muriate of ammonia, soda compounds, and sulphuric acid.

Turning to the seven months' trade the increased imports of 31,428,000% is divided between 1.9 million for food, 23.9 millions for raw materials, and 627,000% for manufactured articles; while the 32,733,000% increase in exports this year represents 25.6 millions for manufactured goods, 5.9 millions for raw materials, and 812,800% for food. We give the table of imports and exports of chemicals, drugs, dyes, and colours for the seven months on another page, the totals of which are as follows :—

	1905	1906	1907	+
Imports	5,718,516	5,898,693	6,809,527	910,834
Exports	8,654,024	9,220,270	10,410,976	1,190,706

The increased exports in the foregoing practically extend to every item (quinine being the notable exception). "Other drugs and medicinal preparations" present a healthy record, this business alone amounting to well over a million sterling so far this year, of which quinine represented 26,837%, or 573,191 oz. The two leading lines in British chemical industry—bleaching materials and soda compounds—show a continued expansion, and it is satisfactory to note that shipments to the United States are more than maintained. It is quite evident that chemicals are fully keeping pace with the other branches of our commerce, and the Returns as a whole indicate that the trade boom has not yet reached its culmination.

University Grants.

FOLLOWING up the particulars which we gave last week about the educational work of the British Universities, it is interesting to find from the report of the Permanent Advisory Committee of the Treasury on the allocation of the money provided by Parliament in aid of University colleges that in most cases a continuation of the previous grants is to be made. For the next two years (the period was formerly five years) the following allocations are sanctioned : 10,000% each to Victoria University, Manchester, Liverpool University, and University College, London; 9,000% to Birmingham University; 8,000% to Leeds University; 7,800% to King's College, London; 6,000% to Armstrong College, Newcastle-on-Tyne; 5,000% to Nottingham University College and Sheffield University; 4,000% to Bedford College for Women, London, and Bristol University College; 3,400% to Reading University College; 2,250% to Hartley University College, Southampton; and 500% to the London School of Economics. The Treasury Minute also sanctions the grant of 1,000% to Dundee University College. These grants amount to 84,950%, so that a sum of 14,050% of the Parliamentary vote remains, and is available for distribution in grants for special purposes.

From the report of the Committee several interesting points can be gathered, such as the fact that certain medical schools attached to London hospitals have applied for grants; as fundamental questions of future policy were involved the Committee decided not to instruct the inspectors to visit these schools on the present occasion. Attention is called to the fact that overlapping occurs through various educational bodies carrying on similar work in the same areas, and that public money derived from rates or taxes is voted for higher education by different authorities with insufficient information. The Committee have found the question of standards a difficulty in calculating the local income of each college for teaching of a University character in arts and science. For the present they have excluded classes preparing students for matriculation from the category of University work, and the hope is expressed that the practice of the Universities of Manchester, Liverpool, Leeds, and Sheffield in establishing a uniform standard for matriculation may be more widely extended. A well-recognised standard once established, says the report, would make it easier for the colleges to co-ordinate their curricula with those of the secondary schools. We may add that reciprocity in the matriculation certificates of the various Universities, which is much wanted in the interest of students, would then be easy to carry out if the Universities could come to an agreement in the matter. It is proposed to establish a maximum limit of 10,000% for all grants, and on this account Manchester is a loser by 2,000%. It is, however, carefully pointed out that the smaller grant does not imply any loss of pre-eminence. It is stated that the progress made within

the last five years by the Hartley College, Southampton, in work of a University standard has not been as great as was anticipated, but the grant is tentatively renewed.

Fraudulent British Marks.

The marking of foreign goods with fraudulent British names and marks has always been a source of loss of trade and annoyance to manufacturers and exporters; but it is gratifying to know that in France the Customs administration have recently been instructed to inform the French judicial authorities of the arrival of goods thus fraudulently marked with a view to their seizure. This is the result of special investigation on the part of the authorities in which "Windsor soap" and tooth-brushes marked as having been manufactured in London were involved. The facts submitted were examined by the Technical Commission of the National Office for Industrial Property, and they were of opinion that the complaints were justified on the ground that although "savon de Windsor" may be considered a generic term, the inscription "Windsor soap" with the word "London" added must, in the absence of any modifying clause, inevitably lead the purchaser to presuppose British origin. The same may be said of the inscription "warranted London" on tooth-brushes of French manufacture. In cases where such goods succeed in penetrating into France or where false indications of origin are applied in that country to goods of foreign or French production, manufacturers who consider themselves injured by this fraudulent practice should approach the French judicial authorities with a view to the prosecution of the guilty parties. In response to a memorial forwarded by the Association of British Chambers of Commerce to the Foreign Secretary calling attention to this practice, a letter has been received stating, on behalf of Sir Edward Grey, that the whole question is engaging the earnest attention of the British Government. The Association have pointed out in their acknowledgment to the Foreign Office that they have good reason to believe that the practice prevails in other countries than France (where most of the cases are reported), thus rendering it desirable to put the Convention of Madrid into active operation wherever possible.

Weak Spots.

How shall the hope of the future be brightened?
How shall the shadow be moved from the past?
When shall the burden of Pharmacy lightened,
Soar thro' the azure no longer o'ercast?
"Never," saith Ellis, "while Parliament lingers,
Dallying fain with the wish to do naught."
"Never," quo' Reid, "till we rap ower the fingers
Folks that talk big, but are no' worth their saut."

Symes dare not speak for the wrath of the Kaiser,
Michael the Mighty, is purple in hue;
Schemes shrivel up 'neath the scorn of Xrayser;
Bloomsbury wonders what Scotland will do.
"By-laws," saith Cowie, "are quite *ultra vires*,
We'll not kowtow to the Bloomsbury gang."
"Friends," quo' the President, "what you require is
A cure for swelled-headedness; you can go hang."

Thus in a manner serene and politeful,
Brethren wrangle and nothing is done;
Wicked men wink in a manner delightful,
"But," saith the Prophet, "this isn't all fun,
For the 'profession' is losing its charm, I see,
Where is the youth with the chemical touch?
Come, gentle youth, and be wedded to Pharmacy?"
"Nay," quo' the youth, "you'll excuse me. Not much!"

The Price of Spectacles.

The Committee of the Association for the Supply of Spectacles in London Elementary Schools have sent a communication to the "Times" in regard to the prices paid for spectacles by the out-patients attending London hospitals. The letter states that up to January last the prices uniformly charged to out-patients by the hospital opticians were 7s. 6d. for spectacles with sphero-cylindrical lenses, and 2s. 6d. for those with spherical. The authorities at Moorfields Hospital investigated the matter, and made an arrangement by which 1s. 9d. is charged for spherical lenses and 4s. 6d. for sphero-cylinders up to a comparatively high power. The Hospital Sunday Fund, which makes grants to assist necessitous persons to purchase spectacles, has followed the example of Moorfields. The grants are paid to the opticians approved by the hospitals, and the authorities of the Hospital Saturday Fund have insisted that the lower rate should be charged in all cases that they assist. The object of the letter appears to be to bring pressure to bear on the hospital authorities to make price agreements at the lower rates. The Association would be well advised to use its endeavours to break down the present system by which poor persons are only allowed to get their optical prescriptions filled by one or two opticians. This system was the best twenty years ago, but now that there are hundreds of qualified opticians to choose from, the old plan should be abandoned in favour of a system allowing the poor people to obtain spectacles at any qualified optician's.

British Trade in Australia.

In June 1905 Mr. R. J. Jeffray went to Australia as a commissioner on behalf of the Advisory Committee on Commercial Intelligence of the Board of Trade, and the result of his investigations into the conditions and prospects of British trade in Australia have just been issued in the form of a Blue-book. Dealing with the imports of drugs and chemicals into the Commonwealth, he shows by statistics that during the past twenty-five years the United Kingdom has maintained the leading position. But foreign competition has proceeded apace, for while in 1888 the total value of imports of drugs and chemicals into the States now forming the Commonwealth amounted to 258,000*l.*, of which the United Kingdom supplied 243,000*l.* and foreign countries only 12,000*l.*, in 1900 the United Kingdom supplied these commodities to the value of 612,000*l.*, while the figure for foreign countries was 246,000*l.* The figures for the last three years for which statistics are available are as follows:

	1903	1904	1905
United Kingdom ...	509,683	513,218	576,226
British Possessions ...	13,462	23,592	9,882
Foreign countries ...	262,177	288,439	318,673
Total imports ...	785,322	825,249	904,781

The total imports of tartaric and other acids in 1905 amounted to 59,356*l.*; of this France supplied value for 31,044*l.* and the United Kingdom 16,755*l.* Alkalies in the same year totalled 107,472*l.*, Great Britain supplying 83,918*l.* worth and Chili 14,494*l.* Opium was imported to the value of 72,500*l.* in 1905—an increase on the two previous years, but in 1880 the value was 149,231*l.* Great Britain only supplied 1,504*l.* worth, but British Possessions (principally Hong Kong) contributed 61,561*l.* worth and foreign countries 9,435*l.* Perfumed spirits to the total value of 30,872*l.* were imported in 1905, the United Kingdom supplying 14,666*l.* and foreign countries 16,185*l.* (Germany, 8,202*l.*; France, 4,523*l.*; Belgium, 1,456*l.*; United States, 1,846*l.*; other countries, 158*l.*). The progress of native manufacture is shown in the fact that while

In 1895 there were only 40 works engaged in the production of drugs and chemicals, in 1900 there were 59, and in 1905 the number was 95, the employés totalling in the last-named year 1,622 persons. Perfumery is dealt with in a short paragraph, in which it is stated that "in cheap perfumery the German article is no better than the British, but it is 'got up' more attractively, and the German methods of 'pushing' have increased the sale greatly in recent years."

"Kaloo Nuts."

The prosecution at Southwark (reported on p. 290) and the investigation into the identity of these "nuts" have led to some interesting disclosures. A C. & D. representative who interviewed Dr. Millson, the Southwark Medical Officer of Health, on the subject, found that the identity of the "nuts" could not be satisfactorily established. As a result of the interview, however, samples were submitted to a botanical expert, who said they were the seeds of an *Aleurites*, probably *Aleurites Fordii*. The seeds of that species are rather difficult to distinguish from those of *Aleurites cordata*, the fruits being necessary to make absolutely sure. These nuts are the source of Chinese wood-oil, and the entire subject was treated in an article by Mr. J. Masters Hillier in the "Kew Bulletin" in 1906 (No. 4, p. 117). There Mr. Hillier quoted freely from the article on "Chinese Wood-oil" contributed to THE CHEMIST AND DRUGGIST by Dr. Augustine Henry (May 31, 1902), to which our readers will do well to refer. In the "Bulletin of the Imperial Institute" (No. 2 of 1907, p. 134) a report is given of an examination made of the oil obtained from the seeds of *Aleurites Fordii*, in order to determine its quality in comparison with that of the T'ung oil of commerce, which appears to be prepared indiscriminately from the seeds of *Aleurites cordata* or *Aleurites Fordii*, or mixtures of the two. The oil was found to be lighter in colour, but the "constants" when determined were found to agree well with those recorded for commercial samples of T'ung oil. There is one widely-distributed species of *Aleurites*—viz., *Aleurites moluccana*, known in Jamaica as "Country Walnut"—which is said to yield edible kernels and an oil suitable for cooking-purposes. These kernels have been eaten by a botanical contributor to THE CHEMIST AND DRUGGIST without his having experienced any uncomfortable effects; but considering that *Aleurites* is not far removed from *Croton* (Euphorbiaceæ), it would be advisable to take them only in small doses.

RUSSIAN INDUSTRIES.—The Odessa Chulianitz Hadzhibai Salt Industries Association, the joint property of the town of Odessa and the shore proprietors, with chief offices in Odessa, made a profit of 39,776r. in its thirty-fourth (1906) working year, against 21,229r. in 1905. The dividend will be 6 per cent., against 5 per cent. in 1905.—The Warsaw Perfumery Factory (Fr. Puls) made a profit of 55,673r. in its eighth (1906) working year, against 20,170r. in 1905, the respective dividends being 8 per cent. and 3 per cent.

CO-OPERATIVE MEDICINE IN MOSCOW.—According to the "Pharmatz Journal," on the initiative of the Bureau of Professional Leagues in Moscow a new sanitary medical organisation is being formed with the object of serving the professional leagues and establishing an independent proletarian social-medicine service. Sixty-five doctors of various branches of the profession have joined the League, twenty being dental doctors and twenty-five accoucheurs. Twenty-five pharmacies have agreed to allow a discount of 40 per cent. on medicines. Another organisation is that of the first Moscow Artel of Pharmacist Assistants, which has been inaugurated. The objects of the Association are education in pharmacy and the production of chemico-pharmaceutical preparations; and the purpose of the Artel is to acquire pharmacies and instal laboratories and bacteriological cabinets. The Association has already taken one pharmacy, the "Novopetrovsk," on hire.

Births.

JAMES.—At 5 The Promenade, Cheltenham, on July 18, to Mabel and Clarence James—a daughter.

SMITH.—At 221 Soho Road, Handsworth, on August 12, the wife of Frederick Smith, pharmaceutical chemist, of a daughter.

Marriages.

INNES—DOUGLAS.—At Kirkcaldy, on August 9, by the Rev. Stewart Crabb, M.A., assisted by the Rev. James Cosh, B.D., Fred G. Innes, Cupar, to Annie, only daughter of the late Mr. Robert Douglas, chemist, Kirkcaldy.

KIRK—KEIGHLEY.—At All Saints' Church, Otley, Yorks, on July 23, by the Rev. W. S. Hooton, John Robert Kirk, chemist and druggist, Harrogate, to Mary Louisa, widow of the late Mr. David Keighley, Harrogate, and eldest daughter of the late Mr. Joseph Fawthorp, surgeon, Queensbury, Bradford.

MONRO—FEARNLEY.—At the Scotch Church, Karachi, India, on July 24, W. Irwin Monro (representing Messrs. Parke, Davis & Co. in Madras and Southern India) to Olive, only daughter of the late Mr. H. Fearnley, of Delhi.

TODD—MAGILL.—At Windsor Presbyterian Church, Belfast, by the Rev. C. M. Young, B.A., brother-in-law of the bride, assisted by the Rev. W. Colquhoun, B.A., Horatio Todd, pharmaceutical chemist, Hollywood Road, Belfast, to Ethel Grahame Magill.

Deaths.

BICKFORD.—At Exmouth, on July 23, Mr. John Thomas Bickford, chemist and druggist, aged sixty-one.

BRISTED.—At Stansted, Essex, on July 22, Mr. John Bristed, chemist and druggist, aged fifty.

COTTE.—At Watford, on July 26, Mr. Alfred James Cottle, chemist and druggist, aged seventy.

CROCKER.—At Plymouth, on July 28, Mr. Thomas Bazley Crocker, chemist and druggist, aged seventy-one.

DRINKWATER.—At Patricroft, Manchester, on July 2, Mr. George Drinkwater, chemist and druggist, aged seventy-six.

GRAY.—At Bolton, on July 17, Mr. John Henderson Gray, chemist and druggist, aged thirty-nine.

TAYLOR.—At Torquay, on August 9, the wife of Mr. John Taylor, J.P., C.C., chemist and druggist, aged fifty-seven. Mrs. Taylor had been ill for over a year. She had wholeheartedly aided her husband during the two years in which he acted as Mayor, and she did much for charitable institutions in the town by inaugurating Mayoral garden fêtes in their aid. The funeral took place on August 14. The large attendance of townspeople and the profusion of beautiful wreaths testified to the esteem in which Mrs. Taylor was held, and were eloquent of the sympathy extended to Mr. Taylor and his two daughters.

THOMPSON.—Suddenly, at 6 West Parade, Halifax, on August 5, George William Shout, only son of Mr. W. S. Thompson, chemist and druggist, Halifax, aged nine months.

THOMPSON.—At Johannesburg Hospital, on July 16, Mr. Percy D. Thompson, manager for Messrs. Turner & Co., chemists and druggists. Mr. Thompson was a well-known figure in sporting and social life on the Rand. Until about two years ago he was a notable Rugby footballer and one of the leading authorities on boxing. He was a native of Wellington, New South Wales, and had been manager of Messrs. Turners' business at the corner of Pritchard Street and Rissik Street, Johannesburg, for about four years. Mr. Thompson leaves a widow and two children.

Reviews.

Handbook on Petroleum, for Inspectors under the Petroleum Acts and for those engaged in the storage, transport, distribution, and industrial use of petroleum, and its products and calcium carbide, with suggestions on the construction and use of mineral-oil lamps. By Captain J. H. THOMSON and Sir BOVERTON REDWOOD. 9x6½. Pp. 324. 8s. 6d. net. (London: C. Griffin & Co., Exeter Street, W.C.)

FOLLOWING the new edition of Sir Boverton Redwood's "Treatise on Petroleum," which was recently reviewed in THE CHEMIST AND DRUGGIST, this book, which is in a measure a reflection of the larger work, has been revised, this being the second edition. The "Handbook" does not treat of the subject in the encyclopaedic manner in which it is dealt with in the "Treatise," but, on the other hand, the conciseness is a valuable feature. After treating of the origin of petroleum, sources of supply, production and refining and commercial products of petroleum, shale oil and coal-tar, a couple of chapters are devoted to an explanation of flash-points and fire-tests, particulars being given of the process of testing. The confused matter of the various flash-tests is made clear and a useful summary given of petroleum-legislation. The precautions necessary in handling petroleum are then dealt with, and a chapter is devoted to petroleum-oil lamps; the authors do not agree that raising the flash-point would diminish the number of lamp-accidents. Calcium carbide and acetylene are finally considered and useful appendices given of imports, Acts of Parliament, by-laws, regulations, etc., affecting petroleum. The concise style of the book is excellent, while the accuracy of the information cannot be too highly commended.

A Handy Book on the Law of Banker and Customer. By J. W. SMITH, B.A., LL.D. 7 in. x 5½ in. Pp. viii+197. 2s. 6d. net. (London, 1907: Effingham Wilson.)

THE legal principles which underlie the banking system of this country are not generally understood by commercial men. It would be greatly to their advantage if they knew more about them. Dr. Smith, in the present most interesting book, deals with the whole subject in such a manner as to be acceptable to those who are not specially trained in law. After the first chapter, which is chiefly historical, he sketches the relation of the banker and his customer, then proceeds to deal with cheques and their forms, bills and promissory notes, bank-notes, the dishonouring of these monetary documents, deposit-receipts, letters of credit and circular-notes, partnership and other accounts, bankers' lien, principal and surety, forgery, alteration and loss of negotiable instruments, and the book concludes (apart from the index) with a reprint of the Bankers' Books Evidence Act, 1879. Each of the chapters is divided into numbered paragraphs, and a list of these begins each chapter. Throughout the text references to the Acts of Parliament or decisions thereunder, upon which the statements are based, are given. We commend the book to those who want to know exactly how they stand in their banking business.

Window Decoration in the Drug Trade: A Practical Handbook, showing how to dress windows effectively, and containing general rules for the exercise of decorative art. By ERNST SYLLWASSCHY, Editor of "Der Drogenhändler. 8 x 5 in. 136 pp. (J. H. Meyer, Braunschweig, 1907.)

THE author of this little volume, of which a second edition has just been published (*in German*), deals with the question in a very full and comprehensive manner, supplying the enterprising retail druggist with an abundance of practical hints and suggestions. Schemes of decoration for every month in the year are given, the articles shown being chosen with due regard to the season and the probable requirements of prospective customers. In January, for instance, prominence is given to cough mixtures, eucalyptus bonbons, malt extract, beef juice, Iceland moss, etc. An effective decoration is that of a winter landscape, in which fir trees and a cardboard grotto or cavern form the background, and in the foreground is a sleigh pulled by two or three dwarfs or gnomes and heaped up with the various remedies. The "Rat-catcher of Hamelin" is the subject of another attrac-

tive display, the Pied Piper, followed by the rats, being represented as making his way towards "Naphthaline Hill." In another instance the interior of a kitchen affords an opportunity for introducing various household necessities, neat rows of shelves being filled with everything a careful housewife could desire, while the shining pots and pans bear testimony to the efficacy of somebody's polish. In June the window is given up to toilet soaps, cosmetics, pomades, bay rum, dentifrices, creams, powders, and perfumes, all tied up with dainty coloured ribbons and streaming out from a huge flower-bedecked horn of plenty. In July sponges, loofahs, brushes, and toilet accessories of every kind are to the fore, and by an ingenious contrivance the window is made to represent the bottom of the sea. An air-ship (which is not so difficult of construction as might appear) filled with magnesia, mineral waters, lime-juice cordials, and various cooling draughts is another striking novelty, and a goods train, each waggon of which (bearing a suitable placard) is freighted with different specialities, attracts general attention. Suitable "shows" for Christmas, Easter, and the New Year are suggested, and special



reference is made to the display of photographic apparatus and materials, the artistic grouping of the articles is shown, the lighting of the window, and other items of importance. The book contains sixteen illustrations of model windows from the Druggists' Academy and Brunswick, and the one we give is the first of these. It should be distinctly understood that German apothekers (pharmacists) would not dream of fixing up their windows in this manner. In England we have the education of pharmacists, and the majority have business akin to that of German druggists.

PERSIAN PRODUCTS.—According to the British Consul at Baghdad, the crop of Persian galls in 1906 was a large one, and the quality excellent. Blues and greens realised from 16l. 10s. to 17l. 10s. and whites from 12l. 18s. to 14l. 10s. per maund of 460½ lb. The demand was strong, and the local tanneries purchased a large quantity. Most of the better grades were shipped to London, and the residue went to Germany and Bombay. The exports from Baghdad were 7,433 bags (32,517l.) in 1906, against 2,174 bags (14,131l.) in 1905. London absorbed the greater portion of the gum tragacanth exported, the remainder being shipped to Marseilles, Hamburg, and the United States. The quality was poorer than that of the previous year, but owing to a good demand from Europe and the United States prices were about 15 per cent. higher than in 1905. About 900 cases of opium were shipped to China; in the early part of the season prices varied from 92l. to 110l., and in the last half of the year they fell to 65l. It is suggested that the fall in price was due to the contemplated curtailment of the importation by the Chinese Government.

PHARMACY NOTES FROM VARIOUS PARTS OF THE WORLD.

By W. HARRISON MARTINDALE, Ph.D., Pharmaceutical Chemist.

THIS is a continuation of the selections from the paper submitted by Dr. W. Harrison Martindale to the British Pharmaceutical Conference at Manchester.

RUSSIA.

The Russian matter proves exceedingly interesting. I was fortunate enough to get in touch with M. P. Fedoroff, of the well-known Gesellschaft W. K. Ferrein at Moscow. M. Fedoroff's industry in following up my requests was really remarkable, and I am much obliged to him. Particularly is his energy exemplary for the reason that at the time of his correspondence with me they had epidemics of various kinds in Moscow, which kept them busy. The number of prescriptions dispensed daily in this pharmacy at the time of their writing was 2,200—they acknowledge that the number is extraordinary. M. Fedoroff has sent me copies of some hundreds of prescriptions constituting part of the 2,562 dispensed at Ferrein's apotheke on February 5/18, 1907 (February 5th in Russia, 18th in other countries). It is noticeable and interesting that even in 1907 a large number of the scripts are written in our apothecary weights (grains, drachms, etc.). The fact is the old weights are still more used in Russia than the decimal ones, especially by the older physicians; the young physicians, however, work mostly with the decimal system. The prescriptions in question seem exceedingly varied. The diseases for which such a remarkable collection were required were mainly typhoid and influenza. On the day mentioned the staff was the same as usual—seventy-eight pharmaceuten from eight till three o'clock P.M., and seventy-eight from three till ten o'clock. Even now (May 1907) 2,100 to 2,200, sometimes more, prescriptions are dispensed daily. The W. K. Ferrein Co. has in Moscow a factory, wholesale business, two retail shops, apotheke with handverkauf (retail) department, and a factory in Mologa. The whole business employs 284 pharmaceuten (with university diplomas) and about 550 workmen or "hands." The staff at the apotheke is divided into sections with German names—viz. :

Ablasser, dispensers preparing prescriptions for the public.
Receptarii, receiving prescriptions and taxing (pricing) the same.

Controlleure, weighing off and delivering poisons to the assistants.

Verbinder, whose duty is to control and frequently to analyse preparations and to label the same.

Assistants, making up the prescriptions.

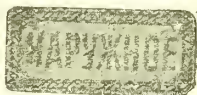
Handverkäufer, selling the things inquired for by the public without prescriptions.

No new preparations are dispensed without a doctor's prescription until their constituents and action are entirely understood.

Russian Labels.



For internal use.



For external use.



To be shaken.

Originals 1½ in. to 1¼ in. long.

SIERRA LEONE.

Mr. G. L. Davies, for eighteen years compounder to the Colonial Hospital at Freetown, sends a few notes on pharmacy in this locality. Patent medicines are much in vogue. Prescriptions are for the most part English, as the majority of medical men have studied in England. There are some local native remedies, also some eclectic ones, details of which are promised later. Among the proprietaries in demand may be mentioned Davis's pain-killer, Fenning's cooling-powders and fever-cure, Jameson's electric ointment, Jayne's liniment, expectorant, etc., Radway's "ready relief," vita-datio, and Wright's Indian vegetable pills.

TURKEY.

Constantinople.

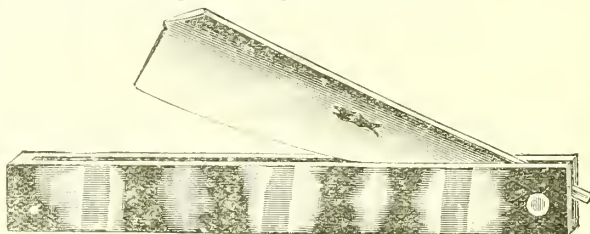
According to M. V. Giannetti, of the firm of J. Canzuch & V. Giannetti, Constantinople, Turkish medical men make use of the formulæ already known in the various Pharmacopœias, and if, at any time, they wish to deviate from these they only succeed in producing incompatible combinations, and although medical men are not allowed to prepare medicines themselves, the majority of them treat their patients in their surgeries with medicaments which they either purchase direct from Europe or have prepared for them locally. At Pera and at Galata many foreign prescriptions are dispensed, but the pharmacists do not trouble to prepare exactly according to the country of origin, or its pharmacopœia, but follow the French Codex, as this work is used in Turkey in an official way.

The social position of the pharmacist in Turkey is by no means enviable—with one or two exceptions. Society considers the pharmacist as a mere dispenser of prescriptions, and refuses to credit him with any scientific knowledge at all approaching that of the medical man.

SALONICA.

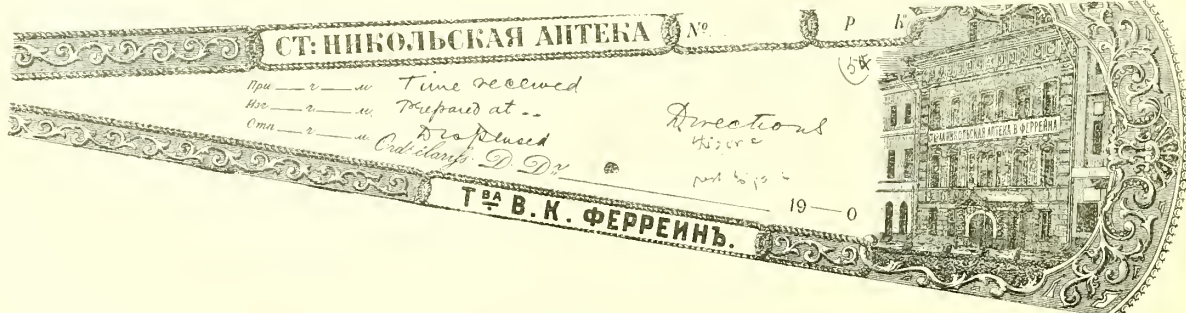
I am indebted to Messrs. A. Scialom & Co., of Salonica, for much information and the following useful notes on opium culture, which I take the liberty of inflicting on the reader :

The culture of opium advances from day to day, but the last two years have been unfortunate owing to heavy rain in the first and great drought in the second.



The knife above shown is used for incising the capsules so as to extract the juice (the opium) from them; this is all the machinery necessary for the work.

The incisions are always made after sunset. The white juice flows very slowly, only a sufficiency to be scraped off



A tie-on label. Original (cut), 10½ in. by 3 in. Black on white. Yellow paper for externals. The edges are folded back (folded part not shown). For dispensing mixtures, powders, liniments, pills, injections, etc., etc.

acruers in eight or ten hours—i.e., at dawn, when it is collected. As time passes the liquid becomes yellowish, or of a darker colour if the weather is bad.

The dealing in opium is in the hands of a few traders in Salonica, whose experience enables them to gauge at sight the percentage of morphine without analysing at all. Occasionally this "analyst" is in error, but very rarely so.

People have tried to adulterate opium with yolk of egg, plums, etc., but without success.

I asked for a few photos, if possible, of my correspondent's opium farm, and he replied that anybody coming to such a place bent on photography would be risking his life, and that there is no silver to spare on such pursuits.

FRANCE (Paris).

A Few Novelties and Curiosities in Dispensing.

The following is a complex application :

Alcoolats de citron et de violettes	...	...	aa.	15 grams
Alcool à 95 per cent.	...	...	...	150 grams
AzH ³	...	...	...	5 grams
Ether officinale	...	...	...	75 grams
Eau dist.	...	...	...	50 grams
Nitrate de pilocarpine	...	...	...	0.50 ctg.
Camphre pulv.	...	...	...	0.10 ctg.
Formol commercial	...	...	...	0.30 ctg.

En frictions 3 fois par semaine $\frac{1}{4}$ d'heure avec une brosse à dents $\frac{1}{2}$ dure.

The next is equally strange assuming it was correctly read :

Cachet contenant dix centigramme de silicate de soude No. 5.

Un cachet au début du petit déjeuner du matin 5 jours par mois.

One or two definite chemical substances have been exploited in France, and are worth recording :

Hypodermic Injections.

The hypodermic method of treatment is, as you are aware, much more advocated in France than in this country. The utmost precaution should be taken to produce an absolutely sterile injection. One of the devices employed in France for this purpose is the auto-injectable tube. This exists in a number of forms. There is first of all an auto-injector resembling a small metal pump, having a powerful spring inside it, which can be utilised for injection of the contents of all ampoules from 1 to 500 c.c. with equal simplicity. The spring maintains the piston at the top of its stroke ; in this there is obviously a certain amount of common sense. The asepsis of the air in contact with the ampoule is ensured by a tampon of wool and gauze. In use the two extremities of the ampoule are filed off above the metal collars (a small file is supplied for the purpose). Attach the platinum needle, previously passed through the flame, over one of the collars ; insert same into the muscular tissue, holding the needle and the ampoule at their point of connection ; attach the auto-injector on the opposite end and press gently.

Another elaboration of the idea is the syringe ampoule (*ampoule seringue*).

All the usual medicamenta are supplied in ampoule form, but the following are of special interest (1 c.c. each) :

Calomel, 0.10 gram (which they write as centigram !).
Ether pur.
Glycerophosphate de soude 0.25 gram.
Huile camphrée à 0.10 gram.
Huile grise à 0.20 gram.
Huile au bi-iodure d'Hg.
Iodure d'éthyle.
Nitrite d'amyle.
Pneumococcine.
Serum Trueneek indolore.
Méthyl-arsenate de soude 0.05 gram.
Scopolamine-morphine.

French Popular Physic.

With regard to medicaments asked for by the general run of people in the typical small French pharmacy, M. Lefond sends me notes, from which I select the following :

EMPLÂTRE MOUCHES DE MILAN.—Cantharides.

HUILE DE FOIE DE MORUE.—Cod-liver oil.

BAUME TRANQUILLE (Codex).—An oily extractive of fresh belladonna, hyoscyamus, poppy, stramonium, etc., with a number of essential oils added.

OINTMENTS.—*Ong. Populeum* (Codex): A lard ointment of poplar-buds (dry), fresh belladonna, and hyoscyamus-leaves. *Ong. de la mère Thècle*: The Codex preparation ; a pitch plaster.

PASTILLES DE RÉGLISSE.—Liquorice pastils.

POMADES.—*Pommade belladonnée* (Codex). *Pommade à l'Iodure de Plomb*.

TEINTURE DE JALAP COMPOSÉE.—Eau-de-Vie Allemande.

TEAS.—*Tisane de Bourrache*: Borage-leaf tea. *Tisane de Chiendent*: Couch-grass. *Tisane de Mauve*: Malva sylvestris. *Tisane de Queues de Cerise*: Cherry stalks. For further notes on tisanes *vide* Riviera.

Of chemicals, the following are in demand by the public :

BIPHOSPHATE DE CHAUX.

CHLORURE MERANÉUX = Calomel.

CHLORURE MERANIQUE.—Corrosive sublimate.

EAU BLANCHE.—Lotio plumbi.

KERMES.

PROTOXALATE DE FER.

TERPINE.

Of simple drugs inquired for may be mentioned, among others :

CASSE EN BATUES.—Cassia-pulp (off.).

GRAINES DE LIN.—Linseed. A teaspoonful on the tongue washed down with a little water is taken for constipation.

GRANULES DE KOLA and GRANULES DE GLYCEROPHOSPHATE DE CHAUX are also required.

Occasionally also Sirop de Limaçons ou d'Escargots (syrup of snails) is wanted for coughs and colds. *Tisane de Shakers* is the American-French equivalent of Mother Seigel's syrup.

INDIA.

Messrs. Kemp & Co., of Bombay, and Messrs. Smith, Stanistreet & Co., of Calcutta, report that complications in the work arise owing to the number of sects—Hindoo, Mahomedan, Parsees—which treat ailments by entirely distinct drugs and methods, without taking Europeans and Eurasians into account.

Amongst preparations dispensed at Bombay during January and February 1907 were noticed—succus cinerariæ, eye drops in cataract, glycolites (non-alcoholic tinctures) ; viavarung, a native remedy for tapeworm— $\frac{1}{2}$ -oz. doses, pulv. holarrhen in dysentery, and oleature of Bhawchee as application in leprosy. Isphagula is largely in demand.

A little work by the late Dr. Ghosh, issued last year, gives an impartial account of indigenous drugs which have been found valuable.

Assam.

Mr. William Moore tells me that the country is very little exploited, excepting from the point of view of the export of tea and rubber (*Ficus elastica* grows wild). There is no literature available on the plants of pharmaceutical interest, many of which doubtless flourish in the interior. *Coptis Teeta* has, however, been described (v. Bentley and other works). This plant is stated to contain as much as 8 per cent. of berberine. It is used for its tonic properties. *Kurchi*, or *Coorchi*, is antidiysenteric. A liquid extract and tincture have been prepared.

Ceylon.

Several remedial plants have been described by Dr. Emmanuel Roberts, of Colombo, who was kind enough to send me his original communications on the subject, and has supplied me with live tubers in one instance, which may perhaps be induced to flourish in suitable temperature :

Asparagus falcatus (Liliacæ).—The leaves are infused, and a decoction of the roots is also prepared. Contains the glucoside asparagin. Acts as a stomachic, is mildly cholagogue in action on the liver, and a valuable diuretic in dropsy. Said to be aphrodisiac. Excellent uterine tonic. Used with advantage in amenorrhœa, menorrhagia, metrorrhagia, and dysmenorrhœa.

Cyperus rotundus (Cyperacæ). Singalese, *Kalandura*.—An infusion of the tubers of the plant mostly employed. Increases flow of saliva when chewed. Internally is stomachic and carminative—on the intestinal membrane it is astringent and styptic. The natives use it for epistaxis. It is useful in dysentery, bronchitis, tonsillitis, and all forms of fever, both alone and in combination with other drugs.

Gugul.—Gum resin from *Balsamodendron Mukul* (Burseracæ).—Antiseptic in action, and is similar to myrrh. Acts as a parasiticide applied to the skin. Injection is used in gonorrhœa. As an absorbent the gum is often used in chronic abscesses. In pruritus of the vulva, scrotum, and anus used

with good effect. Encouraging results in leprosy. (Cf. also Dymock's Mat. Med.)

Plectanthrus zeylanicus (Labiatae). Singhalese, *Iriveriya*.—Leaves and stem, especially the latter in infusion, decoction, or aqueous extract. Employed in dyspeptic conditions, and is valuable in diarrhoea.

Terminalia Chebula (Combretaceae). I.C. Add.—The dose of the powder ranges from a few grains to 2 dr. Dried mesocarp of the fruit is employed—astrigent in action. Is used as a collyrium in catarrhal ophthalmia, also as ointment to the eye. It is a valuable styptic. Is purgative in large doses ($\frac{1}{2}$ to 2 dr.), but may constipate after purging. Reduces albumin and blood in the urine, and is said to have similar action on glucose.

Tinospora cordifolia (Menispermaceae). I.C. Add.—Two species: *Rasakinda* and *Tittakinda*. Concentrated decoction used. The leaves contain much tannin and no starch. Vegetable bitter, stomachic, hæmostatic. Used freely by the natives as diuretic, also employed in rheumatism, sciatica, and beneficial in women's complaints.

THE RIVIERA.

The general public as met with in the South of France possess a seeming extraordinary knowledge of medicine, due in great measure to the fact that French doctors write their prescriptions in French. This has obvious disadvantages. The French pharmacist rarely puts the directions for taking or using the medicament on the label—the patient knows what is being employed, and reads the directions from the prescription. A French prescription handed in for dispensing is usually more complete than an English one, inasmuch as it contains full directions for alimentation and treatment. The last two the English patient receives by word of mouth or on a separate sheet of paper. The result of all this is that the patient in the South of France asks for his half-gram of pyramidon in a cachet, or anything else he may require. The quantity of tincture of iodine sold is enormous—the populace uses it for every kind of complaint; indeed, considering its utility, it is a wonder it is not more frequently employed in England. The quantity of *tisanes* (teas or infusions) is also very large, and beyond hot coffee these are the only hot drinks consumed. A medical man states that he uses the teas with good results, with the explanation that, as the natives drink a good deal of weak wine, the hot teas have the effect of washing poisonous toxins out of the system.

Medicated wines are very largely used as recuperators—wines medicated with such drugs as kola, coca, cacao, the various iron-salts and lime-salts (principally or almost always phosphates and glycerophosphates); and one must not forget vin. quinquina, made direct from cinchona-bark, and not from quinine.

Poultices are in very common use. Mustard poultices made from mustard-meal, as described later, vary slightly from the English article. A mixture of both linseed and mustard is also in common use externally.

The dose of antipyrin astounds one at first. Doses of 1 gram are commonly given to children of fourteen or fifteen years, and children from four to seven years of age receive doses of $\frac{1}{2}$ gram. An adult will take as much as 2 grams without any modifying drug—e.g., caffeine.

The French pharmacist is, of course, a respected individual, not a mere salesman. One never hears customers grumbling or trying to teach the pharmacist his work.

PORTUGAL.

Through the medium of Mr. Batalha Reis, the Portuguese Consul-General, I obtained the assistance of Dr. Jose Pinto e Souza and the firm Azevedo, Irmao & Veiga, pharmacists, of Lisbon.

Syphilis, consumption, anæmia, and malarial affections are the most prevalent diseases. Quinine-salts are largely employed, as also the mercurials and the iodides.

The following are the "national" preparations mostly used in Portugal. Pharmacists are obliged by law to publish formulæ of proprietaries. The prices of all medicaments are officially fixed:

AGUA DOS CARMELITAS.—Spiritus apiastri compositus.

ALGODÃO IODADO.—Xylum iodatine (iodised wool).

ANACYCLUS ACREUS.—Chamomile flowers.

ANTIDIPHTHERIC SERUM 10 c.c. contains 1,500 units (Behring), and *Antitetanic Serum* 10 c.c. contains 1,500 units (Behring),

as manufactured at the State Bacteriological Institute, are given free to the poor.

BISMA.—A form of plaster supplied in two qualities to the poor, who attribute to it great virtues. Its composition is colophony, resin, olive oil, incense, and Armenian bole.

BLACK BEER.—Much used as cordial.

BORRAGO OFFICINALIS (Linn.).—Used by the poorer classes.

CAPSULES OF MERCURY OINTMENT.—Unguentum hydrargyri.

CHARCOAL-NAPHTHOL WITH ANISEED (granulated).—Average dose 15 to 30 grams a day.

CHEIRANTHUS CHEIRI (Linn.) (Cruciferae).—Wallflower. Antispasmodic; used by the poor.

CINCHONA CALISAYA.—Used by the poor.

EMPOLES DE CACODYLATE DE SODIO.—Ampoules of sodium cacodylate.

FUMARIA CAPREOLATA (Linn.).—Used by the poor.

GENCIANA CENTAREUM (*Erythraea major*).—Tonic and stomachic.

GRANULATED EFFERVESCENT KOLA (5 grams contains 0.10 gram).

GRANULATED CALCIUM GLYCEROPHOSPHATE (5 grams contain 0.25 gram of salt).

IODALOSE (IODO-PEPTONE) (5 drops contain 0.01 gram of iodine).

IODO-TANNIN-PHOSPHATE WINE.

JUGLANS REGIA (Linn.).—Used by the poor.

LECITHIN (GRANULATED).—Average dose 20 to 30 grams a day.

MELISSA OFFICINALIS (Linn.) (Labiatae).—Used popularly.

MENOPHYLLINA.—40 grams per day.

PARIETARIA OFFICINALIS (Linn.) (Urticaceae).—Wall pellitory.

Domestic remedy.

PILULAS OLEO-CALCAREAS.—Pilulæ olei jecoris aselli-calcar.

PECTORAL FERRUGINOUS FLOUR.

SODIUM AND MAGNESIUM SULPHATE.—Seidlitz.

STERILISED PHYSIOLOGICAL SERUM.

STERILISED WOOL for making throat-swabbings prior to examination.

SUPPOS. DE MANTEIGA DE COCAU.—Suppos. ol. theobromat.

SYRUP-JAMES (secret composition).

TORMENTILLE RAD.—In considerable demand by the poor.

The following are furnished gratis by the "Assistencia Nacional dos Tuberculosos" to consumptives: Cachets of tannin with guaiacol; calcium phosphate; capsules of terpinol; oleo de figado de bacalhau; cod-liver oil; granules (pills) of quassin; pills of opium extract; solution iodo-tannic, phosphated.

Among a large number of hypodermic injections issued by the Lisbon Pasteur Institute may be mentioned Strychnine cacodylate (1 c.c. contains 0.002 gram) and Succus testicularis. The following are prescriptions "according to Law": Prescription of benzo-naphthol. Prescription consisting of calomel. Quinine and phenacetin (as fever prophylactic).

SPAIN

The following unfamiliar articles are in use among the natives. They are all *bona-fide* remedies; as to their being successful ones is more than can be vouched for, but the Spaniards have implicit faith in their efficacy:

FLOR DE MANZANILLA.—Scented Sweet Camomile flower. As an infusion; a household remedy for colic and flatulency.

PIPAS DE CALABAZA.—*Cucurbita Pepo*. Pumpkin seeds. 5x., pounded up into electuary, with 1 oz. each castor oil and honey, mixed with milk, and taken as a safe expeller of tapeworm.

HOJAS DE LLAUTEN.—*Plantago latifolia*. Astringent infusion used as a collyrium; also as gargle.

HOJAS DE EUCALIPTO.—*Fol. eucalypti*. Infusion, to counteract intermittent fever.

LOOCH PECTORAL.—Almond emulsion, gum, and sugar. Used as a soothing cough mixture.

EMPLASTRA DE VIGO.—Emp. Hydrarg. Ammon. Applied to the groin, considered a cure for hernia.

AGUA VULNERARIA ALCOOLICA.—Eau Vulnenaire Alcoolic. 10 to 20 min. as a stimulant; externally for muscular pain and bruises.

FLOR DE TROMPETILLA AZUL.—*Datura Flor Cœrul*. Smoked in pipes and cigarettes for asthma and bronchitis.

SANGUINARIA.—*Paronychia argentea*. As an infusion, for purifying the blood.

SEMILLA DE BELENO.—Sem. hyoscyami. Smoked in pipes for relief of toothache.

JARABE DE PAGLIANO.—An Italian specialty very much used as emetic and purge.

Gibraltar.

Pharmacy at Gibraltar, as may be imagined, is very English.

One interesting feature is that the inhabitants are fond of taking emetics in place of purgatives; this is quite a

common thing all over Spain and it is necessary to have printed labels ready—e.g. the following:—



The following labels may be translated:

TOMESE UNA CUCHARADA DE MESA TRES VECES AL DIA.—Take one tablespoonful thrice daily.
UEESE SEGUN ORDENADO.—Use according to directions.

I have to thank Mr. W. F. Roberts and Mr. W. H. P. Richards, chemists, Gibraltar, for assistance.

SWITZERLAND.

Of preparations most ordered by the medical profession, the only unusual thing (though common on the Continent) is oxalate of iron. Among typical prescriptions may be mentioned:

Laudanum	...	...	...	10
Huile de Jusquiaume (ol. hyoscyami)	...	...	...	60
Baume Tranquille	...	...	...	60

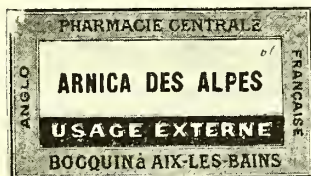
As a friction for pain.

Tartaric Acid is unusual in an ointment thus:—

Acide Tartrique	...	...	...	1.
Naphthol B.	...	...	...	1.50
Ichthyol, Vaseline, etc.	...	...	...	40.0

In the requirements of the poorer classes I notice—

Tapsique, Emplatre de Tapsia, Sirop de Chicorée, a compound Syrup of Rhubarb.



Typical Swiss Labels.

Originals 2 in. long.

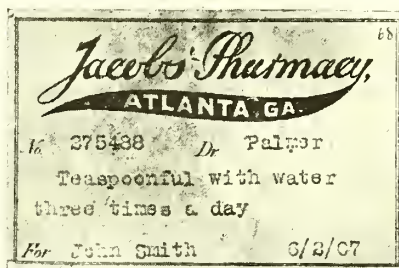
My informant concludes by saying English pharmacy is superior to the French in several ways—e.g., measuring of liquids is more accurate; prescription writing is more rational, notably in the case of pills, which are made, and not ready made; bottles are divided into ounces and half-ounces. Such bottles, he blushes to recount, are unobtainable in France. The numbering of scrips and placing corresponding numbers on labels has been imported from England. The 1-to-7 concentrated infusions are well arranged and practical. The English syrups, tinctures, and liquid extracts soundly represent the drugs from which they are prepared.

Lavender, arnica, gentian, and l'Armoise (herb Artemisia) are much wanted in Switzerland, and are of course local produce.

UNITED STATES.

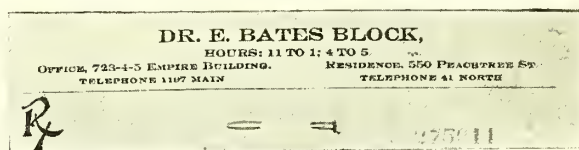
Mr. Joseph Jacobs, of Atlanta, Ga., referred me to the "Proceedings of the American Journal of Pharmacy" of 1898, wherein will be found "Changes in the Drug Business," "Practical Suggestions from Experience," and "Some of the Drug Conditions during the War between the States." Mr. Jacobs' apprenticeship was served under Dr. Crawford Long (the physician-pharmacist discoverer of Ether-Anæsthesia). With regard to the discovery it is

well known that at least four individuals were, or are, claimants to priority in the matter. Ultimately Long defeated the claimants, Morton, Wells, and Jackson.

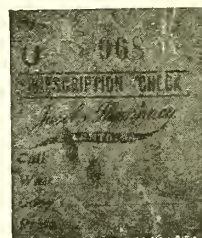


Dispensing-label. Yellow paper. Directions typed.

The following is another medical man's scrip docket; on the back is the pharmacist's address (Peech Tree Pharmacy):



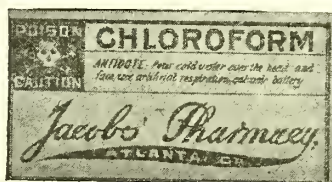
Heading of Prescription blank. Bronze-green ink.



Original 1½ in. by 1¼ in. Black on yellow.

This check-label is affixed to the back of prescriptions. An exactly similar one is retained by the customer while he waits.

Original 2½ in. deep. Black on yellow.



Original 2½ in. by 1¼ in.

Crimson on yellow. Note the antidote.

It should not be forgotten that the chemist retains the original prescription, pasting it in fact into a large book kept ready for the purpose; repeats are obtained by mentioning date and number. Mr. Jacobs, by means of his check system, claims to have filled 700,000 scrips without an error. "Drug conditions in America differ very much from those in England," he remarks. "The middle and poor classes both earn larger wages; nearly all of them either subscribe to or buy the daily papers, and as the daily papers are flooded with patent medicine advertisements, these people are really among the largest buyers of the patent nostrums."

Slip labels are provided for the following herbs:

BLACK COHOSH *Cimicifuga*. In chorea. Uterine tonic.

BLACK HAW *Viburnum prunifolium*. Nerve tonic.

BLUE FLAG	<i>Iris</i> . Hepatic stimulant.
BUTTON SNAKE ROOT	<i>Eryngium aquaticum</i> (Umbelliferae). Aromatic.
CRAWLEY ROOT	<i>Corallorhiza</i> (Orchidaceae).
FRINCE TREE BARK	<i>Chionanthus Virginica</i> . Aperient, cholagogue and diuretic, with sometimes narcotic action.
GOLDEN SEAL	<i>Hydrastis canadensis</i> (Ranunculaceae). Nerve tonic.
MULLEIN LEAVES	<i>Verbascum Thapsus</i> (Scrophulariaceae). Cough, e.g. of Phthisis.
POISON OAK	<i>Rhus Toxicodendron</i> (Anacardiaceae). Poison Ivy. In a variety of affections.
POKE ROOT	<i>Phytolacca decandra</i> (Phytolaccaceae). Emetic, cathartic, alterative.
TRUE UNICORN	<i>Aletris farinosa</i> (Hamoderaceae). Uterine tonic.
STILLINGIA ROOT	<i>Stillingia sylvatica</i> (Euphorbiaceae). Queen's root. Emetic and cathartic.
SWEET CUM BARK	<i>Liquidambar styraciflua</i> (Hamamelidaceae). Similar to Storax.



N.B.—“Word-mark” is trademark, and the preparation is guaranteed under the Food and Drugs Act, June 30, 1906. Guaranty No. 172.

In similar form to this label are Elixir of glycerophosphates of soda and lime, also Pre-digested Beef to be given in crushed ice or with cold water or milk. (N.B.—These do not require guarantee.)

Out of 100 prescriptions selected at random in an Atlanta store, proprietary preparations entered into 72; the remaining 28 were preparations of the Pharmacopœia. Of these 100 prescriptions 55 were liquid; 1 bolus; 34 were capsules and pills, and 10 were powders, and of these six were pharmaceutical, and two were incompatible.

According to Mr. M. I. Wilbert, 2811 Diamond Street, Philadelphia, Secretary to the Philadelphia Branch of the American Pharmaceutical Association, pharmacy, or what is known as pharmacy in the U.S.A., cannot be said to be nationally characteristic. By far the greater number of drug stores partake somewhat of the nature of a bazaar. With regard to the general run of requirements the use of acetanilide is, perhaps, in a way characteristic of America. Up to the present year tons of this substance were used, mostly with sodium bicarbonate, in the customary headache powders. Since the patent for phenacetin has expired, and the price of this substance has been reduced, it has become quite popular as a substitute for acetanilide. The efforts of certain lay journals, particularly *Collins's Weekly* and the *Ladies' Home Journal*, to restrict the sale and use of patent medicines are meeting with success. The same is true of the efforts made in connection with the American Medical Association to restrict the use of proprietary remedies by physicians. In this connection a pamphlet has recently been published by the local Philadelphia Branch of the Pharmaceutical Association.

Chemists' Windows.

Contributed by “C. & D.” Subscribers. The Editor will be glad to receive photographs of effective window-displays for inclusion in this section. Notes on the displays should accompany the photographs. We pay for what we use.



We are indebted to the editor of the “Gas World” for the photograph of an old print from which the above engraving has been made. The design is somewhat in the style of Cruikshank, but the name of the artist in the left-hand corner is given as “Richard Dighton, Inv’t et Sculp.” and the publisher as “Thomas MacLean, Haymarket, London.” The original is a coloured print, and refers to the early days of gas-lighting; but we reproduce it as an authoritative note on the enterprise of chemists in the early days of last century. Mr. Canning Williams, of Reading, who supplied the photograph, remarks in connection with the introduction of coal-gas for lighting-purposes:

One can imagine that even at the time when it first appeared it was provocative of more smiles than frowns among those commercially interested in the new lighting-agent. I. Killen, a chymist and (doubtless) druggist, appears to have been of a sufficiently progressive turn of mind to light his shop with gas. All went well for a time, but one day, just as a stately dame and her little top-hatted boy were passing in front of the premises, an explosion took place of such severity as to shatter the window, send flying in all directions the bottles and other miscellanea of his trade, and knock down the lady and her diminutive and somewhat maturely attired son. Despite the gruesome suggestiveness of his name, Killen seems to be more concerned about the lady than he is at the loss of his property, and though much nearer the centre of the explosion shows no sign of damage.

We observe that the piece of paper blown up towards the top of the window bears the following wording: “Persons electrified at the shortest notice,” and the piece at the bottom has the words “Cure for deafness.”

GRECIAN OLIVE OIL.—The olive-oil crop in the Morea was very small last year, only about one-fifth of a usual yield. This was to be expected after the enormous produce of 1905, as rarely two good olive-oil years succeed each other. It is only in years of plenty that any is exported from the Morea district, as the oil forms an essential part of the diet of all Greek families, and the usual yield just suffices for local requirements. During 1906 about 40,000℥. worth of olive oil was exported from Calamata to Turkey and Russia, but this was from 1905 stock.

Business Changes.

Properly authenticated business notices (not being advertisements) are inserted in this section free of charge if promptly communicated to the Editor.

EXTENSIVE business premises are being erected in Karslake Road, Sefton Park, Liverpool, by Mr. Arthur Begg, chemist and druggist, 227 Kensington, Liverpool.

MESSRS. H. LESTER & SON, chemists, 1 Bridge Street, Nuneaton, have purchased the business of Mr. A. E. Slinn, chemist and druggist, at 116 Abbey Street, Nuneaton.

THE business of Mr. J. Timmis at 102 High Road, Ilford, will be carried on in future under the style of "Timmis & Ingham."

New Books.

These notes do not necessarily exclude subsequent reviews of the works. Any of these books printed in Great Britain can be supplied, at the published price, to readers of this journal on application (with remittance) to the Publisher of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Baylis, T. H. *Workmen's Compensation Act, 1906, which includes Domestic Servants and others.* 7th edit. 12mo. 1s. net. (Low.)

Company Laws in the British Empire: Comparative Analysis. 6d. (Wyman.)

Corner, E. M. *Diseases of the Male Generative Organs.* 7½×4¾. Pp. 290. 5s. net. (Frowde.)

Cromwell, O. *Finger-print Photography.* 7½×4¾. Pp. 72. 2s. 6d. net. (E. Stock.)

De Vries, H. *Plant-breeding: Comments on the Experiments of Nilsson and Burbank.* Cr. 8vo. 7s. 6d. net. (Paul.)

Dibdin, W. J. *Recent Improvements in Methods for the Biological Treatment of Sewage.* 2nd edit. 8½×5½. Pp. 68. 1s. net. (Sanitary Publishing Co.)

Gardner, H. B. *Prolonged Anaesthesia under Nitrous Oxide and Oxygen for Dental Operations.* Demy 8vo. Pp. 12. 1s. net. (Bale.)

Maddox, E. E. *The Clinical Use of Prisms and the Decentring of Lenses.* 5th edit. 7½×4¾. Pp. 218. 5s. 6d. net. (Simpkin.)

Monteuuis, A. *Air, Light, and Sun Baths in the Treatment of Chronic Complaints.* Cr. 8vo. Pp. 73. 2s. net. (Bale.)

Parsons, J. H. *Diseases of the Eye: a Manual for Students and Practitioners.* 8½×5½. Pp. 672. 10s. 6d. net. (Churchill.)

Patents and Designs. Mr. Lloyd George's Bill as amended. Critical Notes by Ernest Lunge and Bernard Dukes. Paper cover. 1s. (Stevens & Co.) [An elaboration of the author's views as expressed at the Society of Chemical Industry meeting.]

Photographic News Year-book of Photography, 1907-08. Illustrated. Crown 8vo. 1s. 6d.

Pusey, W. A. *The Principles and Practice of Dermatology.* Illus. Ryl. 8vo. 25s. net. (Appleton.)

Reid, Sidney H. *Debt and Difficulties.* 52 pp. 1s. [This booklet, published by the author, a solicitor, gives advice to debtors. He does not overburden it with legal phraseology.]

Samson, G. G. *Bees for Pleasure and Profit.* Third edition, revised and enlarged. With a new chapter on bee-keeping in hot climates. Crown 8vo. boards. 1s. net. (Lockwood.)

Sewell, A. J. *The Dog's Medical Dictionary: An Encyclopedia of the Diseases, their Diagnosis and Treatment, and the Physical Development of the Dog.* Illus. 8¾×5½. Pp. 354. 5s. (Routledge.)

Stewart, A. W. *Stereochemistry.* Illus. 7½×4¾. Pp. 604. 10s. 6d. (Longmans.)

Sykes, W. J. *The Principles and Practice of Brewing.* Third edition. Thoroughly revised by the author and Arthur R. Ling. Illustrated. 8vo. 9×6¼. Pp. 606. 21s. net. (Griffin.)

Tanner, H. G. *A Handbook of the Advantages to small Traders of Trading under Limited Liability, with Simple and Practical Instructions for Doing So.* 8vo. limp. 1s. net. (Simpkin.)

Verfasser, J. *The Half-tone Process.* A practical manual of photo-engraving in half-tone on zinc, copper, and brass. With a chapter on three-colour work. Fourth edition. 8vo. 8½×5½. Pp. 352. 5s. net. (Iliffe.)

Trade Notes.

MESSRS. PAUL HEINZE Y CIA. have appointed Messrs. W. H. Hobbs & Co., 5 Trinity Square, London, E.C., as their sole agents for the United Kingdom for essential oils produced at their new factory ("La Victoria") at Malaga, Spain.

GINGAMINT TABLETS have been introduced by Messrs. Burroughs Wellcome & Co., Snow Hill Buildings, London, E.C. The product is practically the old soda mint with the addition of gingerine, and finds employment as an antacid and stomachic. Gingamint is supplied in bottles of 25 and 100.

PACKED GOODS.—Messrs. Burgoyne, Burbidges & Co., 12 and 16 Coleman Street, London, E.C., have issued a new edition of their price-list of packed medicinal, toilet, and household requisites. The list is very comprehensive, and is illustrated to show the style of packing. Veterinary preparations are also included.

SCHOOL-DISINFECTANT.—At the second International Congress on School Hygiene Mr. J. T. Ainslie Walker, F.C.S., read a paper on "Disinfection of Schools." The rôle of schools in promoting the spread of infectious diseases was first pointed out, and the necessity of preventive measures insisted upon. Evidence was then advanced which shows the value of cyllin-spray as a school-disinfectant, and the legal liabilities of school managers to see that the school buildings are maintained so as not to be dangerous to the scholars' health.

SCARLATIN, or anti-scarlet-fever serum (Marpmann), obtainable in two forms, prophylactic and curative, is being introduced into this country by Messrs. Chas. Zimmermann & Co., 9 and 10 St. Mary-at-Hill, London, E.C. The serum No. 1 prophylactic is given in doses of 3 to 6 minims and upwards, in milk, three times daily, to children of one year to six years, the treatment being continued for several weeks to ensure immunity. The curative (No. 2) serum is given in similar doses every two hours. According to the literature which has been sent us, the serum has been used with success in several thousand cases. Messrs. Zimmermann also call our attention to cromocoll, which is intended as a substitute for potassium bromide without the disadvantages of that salt. Bromocoll is a combination of tannin and gelatin with 20 per cent. of organically fixed bromine. The dose is from 1 to 5 grams per day, which may be increased to 30 grams without untoward symptoms.

Personalities.

LIEUT.-COLONEL CLIFFORD PROBYN, L.C.C., has been appointed Governor of Burlington School, Strand, and also of Tenison's School.

MR. F. J. SKIRROW, chemist and druggist, Market Street, West Houghton, is one of the successful competitors in the "Daily Mirror" free trip to Norway.

MR. A. H. MITCHELL MUTER, F.I.C., writes to say that he is not the only principal of the South London School of Pharmacy, Mr. C. A. Hackman, F.I.C., being co-principal.

MAJOR WALTER THOMAS GRICE (of Smith, Stanistreet & Co., Calcutta) has been promoted to be Commandant (with the rank of Lieut.-Colonel) of the 1st Battalion, Calcutta Volunteer Rifles.

MR. HUGH GALT, B.Sc., M.B., has been appointed Dean of the Medical Faculty at St. Mungo's College, Glasgow, Professor Macphail having obtained an appointment in the Charing Cross Medical School, London.

MR. ALBERT LARKING, Assistant Secretary of the Early Closing Association, has been considerably handicapped in the discharge of his duties for some months by an acute attack of neuritis. He has been lying ill at Woodhall Spa for several weeks, but has sufficiently recovered to return to his post.

Consular Counsel.

Stettin.

An Austrian Consular report on the trade of Stettin for 1906 states that there has been a falling-off in the home manufacture of essential oils of aniseed, coriander, and caraway-seed, and also in clove oil. This is partly due to the fact that in the Hamburg free-port district the residual products can be more easily used in manufacture. In Stettin the essential-oil factories are obliged to destroy the residual products under supervision of a Customs officer before restitution of the duty can be claimed. Business in the Stettin spirit-market was fair, but the export trade last year was at a standstill owing to high prices and the Customs regulations. The prospects for 1907 are, however, more favourable, as rectified and methylated spirits are now cheaper and in greater demand.

France.

Writing in regard to the possibilities of increased trade with France, the Austro-Hungarian Consul at Paris states that a glance at the business done on three of the most important markets for chemical products—Paris, Marseilles, and Havre—is sufficient to prove that France offers a lucrative market for many products manufactured by Austria. Kaolin and talc are imported in large quantities, also sulphate of copper, chlorate of potash, and permanganate of potash, the two latter finding a ready market. The same may be said of glue, gelatin, tannic acid, vaseline, earth-colours, and colouring-extracts. There is a good market in France for countless pharmaceutical articles, such as ichthyol ammon., pine-extracts, medicinal roots, malt-extract, photographic preparations, and good technical and pharmaceutical specialities. These, it is true, need to be well advertised, but if proper steps be taken a satisfactory result is obtained. Austrian preparations have a good reputation in France, and the Consul believes it is most desirable that the direct trading between these two countries should assume larger proportions.

Servia.

The importation of chemicals into Servia during 1905 was considerably in excess of that of previous years, being 7,242,910 kilos., valued at 2,303,140f., as compared with 4,903,744 kilos., valued at 1,953,828f., in 1904. The geographical advantage of Austria is shown in her share of the 1905 imports—viz., 6,508,664 kilos., value 1,703,922f. The various countries' shares in the trade are given in percentages, thus : Austria-Hungary, 73.98 per cent. ; Germany, 19.96 per cent. ; France, 2.18 per cent. ; England, 1.84 per cent. ; Belgium, 1.43 per cent. Sweden and a few others shared the insignificant balance. The greatest increase in the imports of 1905 over those of 1904 was under acids and salts. Generally the class of goods furnished per country was as follows : Raw materials, Austria-Hungary ; aniline colours and fine chemicals, Germany ; pharmaceutical specialities and some cosmetics, France ; caustic soda, alkali, and soda, England. The demand for aniline dyes grows from year to year, and in these goods Germany controls the market. There has been a falling-off in the importation of vegetable oils for chemico-technical purposes, and the import trade in varnish has almost entirely stopped, owing to the heavy import duty.

Algeria.

The American Consul at Algiers reports to Washington as follows : " About one-third of the olive-oil factories are in the district of Kabylia, the other industrial centres being in the districts of Sidi Bel Abbès and Tlemcen, in the Department of Oran. The factories in the last-mentioned district are all in the hands of Europeans, are fitted out with the most modern appliances, and produce oil of the best quality. Manufacturers show no inclination to enter into direct relations with foreign buyers. The best quality of oil is almost invariably shipped to France, and usually the contracts are for the total production of the factories. Smaller factories sell for cash to the local firms. In 1906 the worth of the exports to France alone amounted to \$1,060,000, whereas Germany was represented by only

\$32,000, the United States by \$16,000, Great Britain by \$13,200, Belgium by \$9,000, and Holland by \$7,000. The total exports amounted to almost \$1,137,200. To this must be added a very considerable quantity for inland consumption. Oils of the second pressing are usually exported for the manufacture of soap, and other industrial purposes. Algerian olive oil has usually a stronger aroma of fruit, and this especially applies to the oil from the Tlemcen district, but opinions differ as to whether this is an advantage or not." After careful observations, the Consul is of opinion that the oil intended for export is not adulterated, but that which is destined for inland consumption is largely adulterated with cotton-seed or other tasteless oils. Geranium and other essential oils are produced almost exclusively in the neighbourhood of Algiers ; Boufarik, which is about twenty-two miles from Algiers, is the principal market. There is a factory at Staoueli, in a former Trappist monastery, where essences of all kinds are produced in large quantities. The returns of the exports of essences to France in 1905 amounted to \$310,000, and those for export to other countries to something over \$30,000.

London Drug Statistics.

The following statistics are compiled from information supplied by public warehouses. They relate to the receipts and deliveries of some of the leading drugs from and into the London public warehouses for the month of July 1907, and to the stocks on July 31.

	July		Stocks		1907	
	Landed	Delivd.	1907	1906	Imprtd.	Delivd.
Aloes..... cs, etc.	384	186	521	357	1,279	1,087
"..... gourds	715	248	467	—	1,079	612
Aniseed, star.....cs	—	—	—	—	—	—
Arrowroot.....pkgs	665	756	6,670	9,422	7,940	5,628
Balsams..... cks, etc.	4	51	621	449	479	351
Calumba..... bgs	—	111	639	246	712	466
Campbor.....pkgs	1,026	970	3,525	705	8,225	5,607
Cardamoms..... "	274	384	2,532	2,033	3,457	2,186
Cinchona..... "	862	417	5,032	6,633	3,915	3,890
Cocculus indicus..... "	—	5	75	—	100	25
Cochineal..... "	67	85	349	202	575	462
Cubebs..... "	—	2	440	448	—	102
Dragon's-blood..... "	3	7	53	95	46	121
Galls..... "	53	227	2,458	1,811	3,654	2,508
Gums—						
Ammoniacum..... "	—	2	39	13	34	6
Animi..... "	88	74	127	201	594	657
Arabic..... "	1,475	1,242	9,284	5,264	7,957	6,557
Asafetida..... "	8	69	258	793	808	908
Benzoïn..... "	320	125	1,182	1,057	1,547	1,405
Copal..... "	5,788	5,408	15,540	17,528	29,039	28,927
Damar..... "	870	971	2,209	2,469	5,371	5,301
Galbanum..... "	—	—	—	—	—	—
Gamboge..... "	29	18	43	108	90	131
Guaiacum..... "	—	—	51	54	17	15
Kauri..... tons net	274	160	1,110	1,056	1,452	1,703
Klino.....pkgs	—	—	66	64	37	17
Mastic..... "	6	5	19	15	62	40
Myrrh, E.I..... "	10	13	287	227	252	179
Olibanum..... "	119	133	1,630	3,843	1,167	2,026
Sandarac..... "	120	92	489	518	979	1,064
Tragacanth..... "	139	1,439	4,221	6,317	9,040	9,915
Ipecacuanha—						
Cartagena..... "	7	11	47	45	133	140
E.I. ("Johore")..... "	36	33	11	2	143	150
Matto Grosso..... "	82	40	117	85	166	113
Minas..... "	—	8	63	20	122	77
Jalap..... bls	—	6	29	243	20	60
Nux vomica.....pkgs	—	99	11	760	747	745
Oils—						
*Aniseed, star..... cs	—	—	33	82	13	38
*Cassia..... "	—	6	33	38	87	72
Castor.....pkgs	240	175	221	222	1,102	1,070
Coconut..... tons	303	338	426	248	1,231	926
Olive..... cks, etc.	937	946	3,576	965	6,030	3,073
Palm.....tons	11	1	11	—	28	22
Quinine..... lb	937	2,618	221,824	199,434	43,147	27,913
Rhubarb..... chts	101	55	236	138	411	372
Sarsaparilla..... bls	102	125	229	93	850	689
Senna..... "	488	337	791	1,649	1,887	2,560
Shellac.....cs.	5,399	4,081	15,762	17,476	30,150	26,837
Turmeric..... tons	101	23	393	282	317	155
Wax—						
Bees'.....pkgs	431	435	785	2,389	3,250	3,781
Vegetable..... "	65	56	152	375	244	396

* Stocks of essential oils at Smith's Wharf and Brewer's Quay are not included.

Trade Report.

NOTICE TO BUYERS.—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C., August 15.

BUSINESS has been fully resumed in the drug, chemical, and produce markets this week, but the changes in prices have been few. Raw cocoa has had a sharp advance, so much so that proprietary brands of the refined article have been raised, and there is no prospect of a decline at present. Cocoa-butter is about 4*d.* higher. Among drugs, cascara sagrada and hydrastis (golden seal) are firmer. Both Maltese and Mogador cumin seeds are advancing in conjunction with other Moroccan products. Minas and Cartagena ipecacuanha were much lower in auction. Aniseed oil is tending firmer. Opium is quiet and a shade easier. Morphine is unchanged, but heroin and heroin hydrochloride are much dearer. Among chemicals, benzols and copper sulphate have gone in buyers' favour. Cream of tartar, citric and tartaric acids are all unchanged. Glycerin is firm. The following are the principal changes of the week, including those recorded at the auction of first-hand drugs:

Higher	Firmer	Easier	Lower
Cardamoms	Aniseed oil	Areca	Aloes, Cape
Cocoa-butter	Cascara	Benzols	Antimony
Cumin-seed	Hydrastis	Buchu	Guarana
Heroin and	Jalap	Colocyath	Ipecacuanha
heroin hydro-		Copper sulph.	(Cartag. and
ch'lor.		Cotton oil	Minas)
Honey (Jam)		(cr.)	Linseed oil
		Palm oil	Menthol
		Peppermint	Sarsaparilla,
		oil (Jap.)	grey
		Shellac	Wax, bees'
			(Jam.)

Cablegram.

NEW YORK, August 15.—Business in drugs is slack. Opium has an easier tendency, but the quotation for druggists' is still \$7 per lb. by single cases. Genuine fall-dug hydrastis is scarce, and higher at \$1.60. Guarana is declining; \$2 per lb. will now buy. Cascara sagrada is active at 9c. per lb., and podophyllum-root has advanced to 6c. Copaiba balsam is easy at 45c. per lb. for South American pure.

ACID, ACETIC.—Although the consumption this summer has been somewhat affected by the bad weather, there is little prospect of a decline, as the price of acetate of lime continues to be maintained at a high level; 98 per cent. is quoted 37*l.* 10*s.*, and 99 per cent. to 100 per cent. 38*l.* 10*s.*, in small wholesale quantities.

ACID, CITRIC, remains quiet, foreign, ruling at the old figure of 1*s.* 11*d.*, and English 1*s.* 11½*d.*

ACID, TARTARIC.—Foreign is not obtainable below 11*d.*, and English is also unchanged at 11½*d.*

ANISEED.—In the drug auction 25 bags of Russian sold without reserve at 19*s.* to 20*s.*, and 30 bags dark Levant at 18*s.* to 20*s.* per cwt.

BENZOLS are easier, 50-per-cent. prompt offering at 8½*d.* to 9*d.*, and 90-per-cent. at 8*d.* to 8½*d.* per gal.

CAMPHOR.—A steadier feeling has prevailed in crude camphor, the spot value of Chinese being about 220*s.* to 230*s.* per cwt., but there is only a small inquiry. The price

of Japanese from the monopoly is 320*s.* English refined is unaltered at last week's reduction.

CANARY-SEED continues slow of sale. Good Morocco and cleaned Plate have been sold at 35*s.* per quarter on the spot. Turkish is held for 37*s.*, but there is no demand.

CASCARA SAGRADA is still tending upwards, practically nothing being obtainable on the spot at below 43*s.* to 44*s.*, and for shipment 43*s.* c.i.f. has been paid for near at hand. To-day 45*s.* to 47*s.* 6*d.*, c.i.f., has been cabled. The American telegraphic strike affects business in this article. In the drug auction 238 bags from Yokohama sold at from 42*s.* 6*d.* to 43*s.* per cwt. for 1906 bark, and for 11 bags sea-damaged 42*s.* was paid.

CHAMOMILES.—The new Belgian crop is offered for shipment during August at about 100*s.* per cwt., c.i.f. terms. Reports from the growers state that the weather has not improved, and while it cannot be definitely stated that the crop will be a small one, the prospects still tend that way.

CHIRETTA.—Small sales have been made at 3½*d.* per lb.

CINCHONA.—The auction in London on Tuesday was concluded in less than ten minutes, only 138 packages being offered, comprising 53 bales Java and 85 packages Ceylon. The Java bark (which weighed 9,275 lb.) alone was disposed of. Ledgeriana stem chips sold at 5½*d.*, branch at 4¾*d.*, and root at 7½*d.* per lb., Messrs. Howards & Sons, Ltd., being the purchasers. The average unit was ½*d.* per lb. At the auction to be held at Amsterdam on August 22, 8,602 bales and 622 cases, weighing 824,342 kilos. and containing 46,520 kilos. quinine sulphate, will be offered. The manufacturing-bark contains an average of 6.10 per cent. of quinine sulphate. The above 9,224 packages represent 132,654 kilos. of pharmaceutical and 691,688 kilos. manufacturing bark, containing respectively 4,342 kilos. and 42,178 kilos. of quinine sulphate; 114 packages Java coca-leaves, weighing 5,917 kilos., will also be offered.

COCOA-BUTTER.—At auction prices advanced 3½*d.* per lb., 150 cases (15 tons) Cadbury's A selling at 1*s.* 11½*d.* to 1*s.* 11¾*d.*, and 50 bales (5 tons) at 1*s.* 10*d.* to 1*s.* 10½*d.*

COPPER SULPHATE is again easier to the extent of 10*s.*, spot offering at 30*l.* Liverpool is cheaper at 27*l.* 5*s.*

CORIANDER-SEED is in more request on the spot, as shipments from Casablanca are stopped at present owing to the recent fighting. A fair quantity has been sold at 8*s.* 3*d.* per cwt., and retail lots at 8*s.* 9*d.*

CREAM OF TARTAR.—The market is practically unchanged on the spot, although advices from France, Spain, and Italy all report a firmer tendency for raw material; 98-per-cent. powder is quoted at 81*s.* and 95-per-cent. 79*s.* per cwt.

CUMIN-SEED is much dearer, the demand from the Continent continuing and only small supplies arriving. The nominal value of Morocco is 42*s.* 6*d.* to 45*s.* per cwt., according to quality. Malta is quoted 50*s.*, c.i.t. terms.

ERGOT is a difficult market for buyers, as little or no trustworthy information appears to be available as to what is transpiring in Spain. The nearest value for genuine new crop is 1*s.* 7*d.* per lb., c.i.f., and for *Sifted* old crop, so-called Spanish, 1*s.* 3½*d.*, c.i.f., is quoted from the Continent, similar quality being obtainable on the spot at 1*s.* 3*d.*

FENUGREEK-SEED is firm, with sales of Morocco on the spot at 10*s.* to 10*s.* 6*d.* per cwt.

GOLDEN SEAL (HYDRASTIS).—The easier quotations from New York noted last week apply to the comparatively useless spring-dug root, whereas fall-dug is scarce and, if anything, firmer, holders on the spot asking 7*s.* per lb. net.

HEROIN AND HEROIN HYDROCHLOR.—Owing to the rise in opium, the makers have advanced prices from 7*s.* to 8*s.* per oz., small quantities of either being quoted 23*s.* 3*d.* per oz.

LINSEED.—Fine qualities are steady at 49*s.* to 51*s.* per quarter.

MORPHINE is firm but unchanged, the makers not being at all eager to sell at present prices, as the position of raw material justifies a further advance. The demand is fairly brisk, but mostly appertains to delivery off contract.

OIL, COD-LIVER.—It is usual for quotations on the Norwegian market to sag during the summer months, but the tendency this year has been, if anything, the other way, and private advices to hand this week denote that the market

is "getting firmer." There is little or no spot business doing, however, but several sales for autumn delivery are reported, the range of quotations being from 72s. to 75s. per barrel, c.i.f. terms, for non-freezing oil as to brand. Our Bergen correspondent writes on August 12 that, as is usual at this time of the year, business is of a meagre description, but the last quotation of 69s. per barrel, f.o.b. Bergen, for finest non-congealing cod-liver oil is still maintained. The exports from Bergen up to date amount to 6,760 barrels, against 8,395 barrels at the corresponding date of last year.

OIL, OLIVE.—During the last few weeks the market at Bari has undergone a considerable change. The prospects were for an abundant crop in the Bari district, and it was thought prices would be lower, but it now appears that unfavourable dry weather has caused many of the olives to fall, so that the decline in prices which was anticipated with the new crop is now somewhat remote.

OILS, ESSENTIAL.—*Lemongrass* oil continues slow of sale at 3d. to 3½d. per oz. spot, and for Ceylon *Citronella* prices remain unchanged at 1s. 10d. to 1s. 10½d. per lb. spot. *Cassia* oil is quiet at from 5s. 9d. to 6s. 3d. per lb. as to analysis. *Star-aniseed* oil is firm, with sales at 5s. 2d. on the spot, and for shipment 5s. 3d. c.i.f. is quoted. Japanese *Peppermint* oil is unchanged at 5s. 2d. spot for Kobayashi, and for shipment 4s. 10½d. c.i.f. is quoted. American *HGH* sells at 11s. 9d., and Wayne County at 7s. 9d. The American oil is now in process of distillation, and the market is somewhat unsettled.

OILS, FIXED.—*Linseed* is lower at 22s. 1½d. in pipes or barrels on the spot. *Coconut* oil is unchanged on the spot at 39s. for Ceylon and 45s. for Cochin, but forward shipment is cheaper. *Cottonseed* is easier at 28s. 9d. for crude, but refined is unaltered at 29s. 9d. to 30s. for ordinary pale refined, and 32s. 6d. to 33s. for sweet refined. *Lagos Palm* oil is easier at 33s. *Turpentine* is dull at 41s. 6d., and *Petroleum* is unaltered at 6d. for Russian, 6½d. to 6¾d. for ordinary American, and 7½d. to 7¾d. for water-white.

OPIUM.—In auction four cases of Turkey opium testing 9.65 per cent. morphine were held for 21s. per lb. Privately the London market is quiet, and prices are a shade easier at the moment, with a lack of news from Turkey. The spot price for good fair Smyrna druggists' is 21s. 6d., up to 22s. 6d. being asked for good slightly. Persian has been in demand for shipment, up to 16s. 6d. per lb., c.i.f., having been paid for 10 per cent.

SMYRNA, August 2.—The sales amount to 21 cases for account of interior speculators. The arrivals in Smyrna to date amount to 830 cases, against 1,619 cases at the same period last year.

SMYRNA, August 3.—The sales amount to 48 cases at again higher prices. They comprise 25 cases extra Karahissar t.q. at the equivalent of 24s. 5d., 16 cases ditto at 24s. 11d., and seven cases at 26s. 3d. per lb., c.i.f. terms. The above business was on behalf of dealers in the interior, who, being obliged to pay higher prices to the producers than those quoted on the market, wired to their agents in Smyrna to buy for them; this means that on the first heavy demand from consumers, prices will advance again. The arrivals amount to 830 cases, as compared with 1,619 cases last year on the same date. The July sales amount to 325 cases.

A monthly report dated Smyrna, July 31, states that reports from all the growing districts have come down, estimating the total Turkey crop (including 375 cases of Salonica) to be only about 3,000 cases. It appears that the poppy suffered a great deal more from cold, drought, and other causes than was anticipated, and whole districts gave nothing at all. From this it will be understood that much excitement prevailed throughout the month, and speculative purchases, coupled with those for the United States, soon advanced the price of usual run t.q. from Ps. 140 to Ps. 240 (equivalent to 15s. to 26s. per lb., c.i.f. European ports). The sales during July amounted to 304 cases, of which 184 cases were for America and the balance for local and interior speculators. The general opinion is that the present position will be maintained, and should consumers respond we may likely see 28s. to 30s. per lb. the ruling prices. The arrivals to date amount to 814 cases, against 1,619 cases at the same period last year, and in Constantinople 124 cases, against 711 cases. The stock is 1,333 cases, against 2,360 cases at same period last year, and in Constantinople 122 cases, against 283 cases.

POTASH PERMANGANATE is firm at 38s. per cwt., ex wharf, which price might be shaded on keen buying.

QUICKSILVER continues unchanged at 7l. per bottle and at 6l. 16s. in second-hands. It is exactly twelve months ago since any alteration was made in the official price of quicksilver by the importers, the last occasion being recorded in our issue of August 11, 1906, when the price was reduced 5s. per bottle to 7l.

QUININE continues stagnant, but the market remains unchanged at 7¾d. per oz. for best German brands of sulphate.

The Amsterdam quinine-works will offer by public auction on Friday, August 30, 1,417,500 kilos. (50,000 oz. net) of the Amsterdam brand quinine sulphate B.P.

SHELLAC.—On the spot prices are slightly easier on the basis of 204s. per cwt. for fair TN Orange. Good and fine Orange-marks are slow of sale at from 215s. to 230s. spot, and at 200s. to 220s. c.i.f. A. C. Garnet is quoted 210s., and G. A. L. 187s. 6d. to 190s. spot. Futures are neglected and nominal.

SPICES.—At auction 10 bags Ceylon *Pepper* were sold at 5½d. for good heavy bold, and 38 bags Saigon siftings sold at 1½d. Privately the market for Singapore is steady, with little business passing. On the spot fair quality is quoted 4¾d., and for arrival there are buyers of August-October shipment at 4½d. c.f. and i., delivered weight. At auction 20 cases and 198 bags Singapore *white* were offered and bought in, including fine bold washed at 11d., and fair at 6¾d.; 10 bags good washed Ceylon sold at 6½d. Privately the market is quiet, fair Singapore being quoted 6½d. to 6¾d., and fair Penang 6d. *Chillies* were steady at auction. 66 bags Java offered and sold, including good red at 55s.; 46 bags sea-damaged Japan offered and sold, subject. Bombay and Ceylon *Capsicums* were bought in. *Pimento* was not offered, and privately fair is quoted 3d. *Ginger* was also not offered. *Cinnamon chips* were steady, 100 bags fair, partly selling at 2¾d. per lb. Five cases Penang *Cloves* were offered and bought in at 1s. 6d. for picked; and 24 bales Zanzibar sold at 7d. for fair. Privately Zanzibar are dull and easier for delivery, closing sellers of June-August at 7½d. For arrival the sales include September-November shipment at 5½d., and January-March at 5½d. to 5¾d., and sellers c.i.f., delivered weight. *Nutmegs* and *Mace* were quiet.

STROPHANTHUS.—Fair green Kombe is obtainable at 2s. per lb.

SULPHUR.—Reviewing the Messina market during July, a dealer's report states that the new administration of the Consorzio, which entered into office at the beginning of July, has left prices unchanged up to the present, but it is anticipated a decision on that point will shortly be reached. The falling-off in exports from Sicily, which has been a feature this year, also continued during June, although to a lesser degree than in May. On the spot flowers are quoted 6l. 5s. to 6l. 7s. 6d. and roll 6l. to 6l. 2s. 6d. per ton.

TURMERIC.—Privately small sales of fair bright Madras finger have been made at 20s. per cwt., and for Cochin split bulbs 13s. 6d. has been paid. Bengal for arrival is firm at 16s. 6d., c.i.f. terms.

WAX, JAPAN, is quoted 59s. to 60s. spot for good squares.

London Drug Auctions.

At the auction of first-hand drugs a good general demand prevailed for the time of the year, but it was mostly at the sacrifice of values. Cape aloes declined about 5s. to 6s., but fine Curaçao gourd aloes was firmly held. New asafetida was not bid for in auction, but sold well privately at steady rates. Areca and buchu-leaves tended easier. Sumatra benzoin is firmly held, but the demand was extremely small. Cashew-nuts sell well privately, and cardamoms were 1d. to 2d. dearer, due to smaller supplies. Cascara sagrada realised firm rates. Colocynth sold cheaply. Jamaica honey is scarce and dearer. Forced sales of Minas and Cartagena ipecacuanha brought a decline of 1s. and 4d. respectively. The menthol advertised was disposed of prior to the auction. Rhubarb is steady. Grey Jamaica sarsaparilla is plentiful and 3d. lower, but native Jamaica found buyers at steady rates. Squill keeps low, and stocks are heavy. Senega is firm. Jamaica beeswax is steady as compared with private business. The quantities of goods offered and sold is as under, the asterisk denoting private sales:

	Offered	Sold
"Almond-seed"	21	0
Aloes—		
Cape	54	40
Curaçao (hxs.)	16	16
(gourds)	217	21
Socotrine	10	0
Ambergris (tin)	1	1
Ammoniacum	9	0
Aniseed	55	55
Anatto-seed	21	1
Arcca	8	8
Asafetida	153	1
Benzoïn—		
Sumatra	101	5
Bird-lime (Jap.)	50	50
Buchu	24	11
Calumba	2	2
Cannabis indica	23	0
Cardamoms	107	101
Caseara sagrada	249	249
Cascarilla	20	0
Cashew nuts	52	*35
Cassia fistula	9	9
Chamomiles	2	*2
Chiretta	30	0
Coca-leaves	5	0
Colocynth, apple	6	3
Cuttle-bone	39	0
Galls (China)	50	0
(Pers.)	18	18
Ghee	2	0
Gum arabic	42	0
Gum senegal	17	17
Honey—		
Jamaica	50	50
Mauritius	2	0
St. Lucia	9	9
Insect wax	1	0
Ipecacuanha—		
Cartagena	33	17
Minas	44	44
Kola	19	19
Menthol	50	*50
Myrrh	26	6

	Offered	Sold
Nux vomica	2	2
Oil—		
anise, star	5	0
cassia	5	0
chaulmoogra	2	0
cinnamon	8	0
clove	2	0
copaiba	1	1
eucalyptus	32	0
lemongrass	10	0
lime	1	1
melaleuca	1	*1
Olibanum	28	28
Opium (Turkey)	4	0
Orange-peel	13	7
Papain	4	0
Puree	1	0
Rhubarb (China)	20	9
Sarsaparilla—		
grey Jam.	47	47
native	14	9
Senega	5	*1
Senna and pods—		
Alex.	133	0
Tinnevely	19	19
Smilax	11	11
Squill	49	35
Sticklac	31	0
Strophanthus	1	1
Sugar-of-milk (Ital.)	5	0
Turmeric	50	0
Turtle, dried	1	0
Wax (bees)—		
Abyssinian	137	0
East Indian	44	0
Egyptian	38	38
Grenada	1	1
Jamaica	13	13
Japanese	1	0
Morocco	13	0
Nyasaland	2	2
Spanish	23	0
Zanzibar	201	18

ALOES.—Cape aloes sold at a decline of about 6s. per cwt. as compared with the previous auction. Good hard bright (usual 20 per cent. tares) realised 35s. to 35s. 6d., fair ditto 34s., fair, but softish, 32s. 6d., dullish and soft 29s. 6d., dull, drossy, and soft 26s. to 26s. 6d. Algoa Bay aloes sold on estimated tares at 29s. to 29s. 6d. for soft dull, and 25s. to 26s. for drossy, part very soft. Sixteen boxes Curaçao sold at 40s. for fair dullish liver, and 35s. for drossy capey. Of Curaçao aloes in gourds 217 offered, but only 21 sold at 22s. 6d. for low drossy. About 60 large gourds comprised fine liver, which were bought in at 80s.; very coarse liver was bought in at 60s., and capey at 50s. per cwt.

ANNATTO SEED.—A bag of fair bright Madras sold at 23½d. per lb.

ARECA.—Slightly easier; 8 bags fair Ceylon, a few wormy, sold at 20s.

ASAFETIDA.—Several new parcels, consisting on the whole of good quality, were offered, but practically no bids were made in auction. Subsequently, however, about 100 packages of the better qualities changed hands at about last sales rates. The only public business was two cases good alomdy, part pinky block, slightly "made up," which realised 75s. Good alomdy broken block, part pinky, was bought in at 90s., pasty and rather darker at 80s.; dark brown heavy block was held for 70s., and heavy sandy and stony block was bought in at 50s.

BENZOIN.—Quiet, but firmly held. Only 5 cases were disposed of publicly, 6l. 15s. per cwt. being paid for good Sumatra thirds. For good alomdy seconds slightly false-packed sides 8l. was wanted, but a bid of 7l. 15s. is to be referred to the owner.

BIRD-LIME.—Fifty cases Japanese sold without reserve (with all faults) at 4d. per lb.

BUCHU is easier. Sales of fair round green leaf were made at 8½d. to 9½d., and for good green, slightly stalky, 10½d. was wanted.

CALUMBA.—Two bags of fair picked native washed sold at 22s. per cwt.

CARDAMOMS.—Supplies being on a much reduced scale, prices improved 1d. to 2d. per lb. Ceylon-Mysore, good bold pale, slightly warty, sold at 2s. 4d., bold long pale 2s. to 2s. 1d., bold medium pale 1s. 10d., medium and bold palish to pale 1s. 6d. to 1s. 8d., small and medium palish to pale 1s. 2d. to 1s. 4d., brown and splits and pickings 1s. 3d. Bold yellowish pale 1s. 10d., medium and bold ditto 1s. 6d., small 1s. 3d. to 1s. 4d. Seed sold at 1s. 7d. to 2s. per lb.

CASHEW NUTS have been in good demand; 35 bags fair from Cochin had been sold privately, and for 17 cases a bid of 42s. was refused, the lot being bought in at 46s.

CASSIA FISTULA.—Nine bags of fair Dominican sold at 17s. 6d. per cwt.

COLOCYNTH.—Three cases ordinary small to medium dullish Turkey apple sold at 7d. per lb. subject, being cheap.

GALLS.—Six bags of sea-damaged Persian sold at from 55s. to 65s. per cwt.

GUM ARABIC.—Fair pale and amber half hard Soudan sorts were held at 34s. to 35s. per cwt.

GUM, SENEGAL.—Ten bags of badly damaged (the tears being run together) sold without reserve at 25s., and 7 bags slightly damaged realised 28s.

HONEY.—Dearer. Fifty packages Jamaica, all that offered, sold at 22s. for fair yellow liquid, at 20s. to 21s. for dark liquid, and at 20s. 6d. for dull setting. Nine barrels fair amber liquid St. Lucia realised 23s. 6d. per cwt.

IPECACUANHA.—The feature of the auction was the offering of 44 bags Minas and 16 packages Cartagena without reserve. The former sold at a reduction of 1s. to 1s. 2d. per lb., from 5s. 1d. to 5s. 2d. being paid for ordinary lean, and 5s. 3d. to 5s. 4d. (one lot 5s. 5d.) for good bold partly native picked root. The 16 packages Cartagena sold at from 4s. 7d. to 4s. 9d. per lb. (one lot 4s. 10d.) for fair grey, being about 4d. per lb. cheaper. Out of a further 13 bags offered one sold at 5s. for fair. No Matto Grosso was offered.

KOLA.—Thirteen bales fair small to bold washed West Indian halves sold at 23½d. per lb., and for a further 6 bags fair washed W.I. 23½d. was also paid.

MENTHOL.—Fifty cases, consisting of the Kobayashi and Suzuki brands, were catalogued for sale "without reserve," but were sold prior to the auction for export to the Continent at 7s. 6d. per lb. Privately 7s. 9d. is quoted.

MYRRH.—A case of good picked gum sold at 6d. per cwt., and for five bales siftings 60s. was paid.

NUX VOMICA.—Two bags good bright small Cochin buttons sold at 10s. per cwt.

OIL, CASSIA, containing 74 per cent. c.a., was held for 5s. 10d. per lb.

OIL, CINNAMON BARK.—Ceylon is scarce; 1s. 3d. per oz. was asked for 8 cases.

OIL COPAIBA.—A case sold at 2s. 7d. per lb.

OIL, EUCALYPTUS, of B.P. quality, was obtainable at 1s. 0½d. per lb. for not less than 10 cases.

OIL, LIME.—A case of good West Indian distilled sold at 3s. 2d. per lb.

OLIBANUM.—Seven cases of good pickings, partly blocky, sold without reserve at 16s., and 21 cases woody pickings at 9s. per cwt.

ORANGE PEEL.—Seven cases of dull Maltese strip realised 53½d. per lb. without reserve.

RHUBARB.—Steady. Three cases of small round orange-coated Shensi and druggists' trimming root, with seven-eighths good pinky fracture, were bought in at 4s., the value being about 3s. 2d. to 3s. 3d. Two cases of medium flat Shensi, with three-quarters good pinky fracture, sold at 2s. 10d., and a case of round and flat Shensi pickings, with three-quarters good colour, sold at 1s. 10d. Three cases slightly stalky round Canton trimming root, with three-quarters good pinky fracture, were bought in at 2s. 2d. A case of bold flat Canton, with three-quarters similar fracture, sold at 1s. 10d., and two cases Canton pickings, with two-thirds fair colour and one-third dark and spongy, sold at 1s. 6d. Five cases of small to medium round horny dull coated High dried, with three-quarters fair pinky fracture and one-quarter grey and dark, were bought in at 1s. per lb.

Three cases of small to medium flat dullish coated high dried, with half fair colour and half grey and dark fracture, slightly wormy, sold without reserve at from 1s. 5d. to 1s. 6d.

SARSAPARILLA.—Grey Jamaica being plentiful, a decline of 3d. per lb. was accepted; 1s. 6d. to 1s. 7d. being paid for part coarse and dark to good fibrous grey, and 1s. 5d. for sea-damaged. Native Jamaica was steady, the bulk of the 14 bales finding buyers at 1s. 1d. to 1s. 2d. for fair to good red and 1s. for ordinary pale yellow and grey mixed.

SENEGA, being scarce, was firmly held at 2s. 3d. net, a bid of 2s. 2d. being refused. A bale of the lot advertised had been sold privately; for shipment 2s. 5d. per lb. c.i.f. is quoted.

SENNA.—Only 19 bales Tinnevely were brought forward, for which 1½d. per lb. was paid (partly subject), without reserve, for ordinary yellowish and specky leaf. Fifty-three bales Alexandrian half-leaf of dull colour were held at 3d. per lb., and for a further 50 bales of similar quality 3½d. was the buying-in price.

SMILAX.—Eleven bales common sold without reserve at 1d. per lb.

SQUILL.—Twenty-five bags damaged by sulphur sold without reserve on underwriters' account at from ¼d. to ½d. per lb.; 14 bags fair yellowish were bought in at 6d. Ten bags damp yellowish sold without reserve at from 1¼d. to 1½d. per lb.

SUGAR OF MILK.—Italian (B P.) was held at 49s. per cwt.

WAX, BEES'.—Jamaica sold at a decline of about 7s. 6d. per cwt. as compared with previous public sales, but at steady prices when compared with recent private business, about ten packages good bright yellow and brown realised 7l. 15s. Thirty-eight bags fair Egyptian block realised 6l. 12s. 6d., and Zanzibar sold at from 6l. 12s. 6d. to 6l. 15s. for ordinary mixed colours and at 80s. for low drossy. For 57 bales of fine red Abyssinian wax a bid of 6l. 15s. per cwt. is to be submitted. Good even brown and yellow Zanzibar block was held at 7l.

Heavy Chemicals.

The demand in the heavy-chemical market for both main and miscellaneous products continues of a satisfactory nature both on home and export account, and consequently the tone of the market is very steady. Values are practically all on the firm side.

ALKALI-PRODUCE.—As already indicated, more attention is being given to the question of forward requirements in this department, but of course, as yet, inquiries are not nearly so heavy as they will be later on. Business is being done at practically present rates. Bleaching-powder has been moving well, and is steady at 4l. 10s. to 4l. 15s. per ton for softwood casks free on rails. For export values run from 5l. to 5l. 10s. per ton, f.o.b. Tyne, according to market. Caustic soda remains unchanged, and has been in steady request for both home and export: 76 to 77 per cent., 10l. 10s. to 10l. 12s. 6d.; 70 per cent., 9l. 15s. to 9l. 17s. 6d.; and 60 per cent., 8l. 15s. to 8l. 17s. 6d. per ton. Ammonia alkali continues to maintain a firm tone, with strong demand at 4l. 10s. to 4l. 15s. per ton in bags free on rails. The better demand which has been ruling for soda crystals is well maintained, and values are steady at 60s. to 62s. 6d. per ton, f.o.b. Tyne, and 65s. to 67s. 6d. per ton, f.o.b. Liverpool. Saltecake also is moving well on both home and export account, and remains at 40s. to 42s. 6d. per ton free on rails in bulk. Bicarbonate of soda, 6l. 5s. to 6l. 15s. per ton in 1-cwt. kegs, and 5l. 17s. 6d. to 6l. 2s. 6d. per ton in large casks, f.o.b. Liverpool. Chlorates of potash and soda are steady at 3½d. to 3¾d. per lb., according to quantity. Yellow prussiates of potash and soda are in better request than they have been of late at 5½d. to 6d. per lb. and 3¾d. to 3½d. per lb. respectively. Hyposulphite of soda is hardly moving so well as it was, and although there is no appreciable decline in quotations the figures are scarcely so firm as they were. In large casks 5l. 15s. to 6l. 5s. per ton, and in 1-cwt. kegs 6l. 10s. to 9l. per ton in accordance with quality and quantity, etc. Silicates of soda are in good average request and firm: 140° Tw., 4l. 2s. 6d. to 4l. 12s. 6d.; 100° Tw., 3l. 12s. 6d. to 4l. 2s. 6d.; and 75° Tw., 3l. 5s. to 3l. 15s. per ton, according to quality, quantity, and destination.

SULPHATE OF AMMONIA remains fairly steady, and there is a moderate demand on prompt account, while exports have been good. Beckton, 12l. 2s. 6d.; Beckton terms, 11l. 12s. 6d. to 11l. 13s. 9d.; London, 11l. 15s. to 11l. 16s. 3d.; Leith, 12l.; and Hull, 11l. 15s. As regards forward business, buyers' ideas seem to be about prompt figures, while sellers incline towards 2s. 6d. to 5s. higher.

American Drug-market.

New York, August 6.

The volume of business continues small, but there is no abatement in the firmness of the market. Little improvement is expected before the fall, and holders quietly accept the conditions and sit tight. Opium, cascara, and mandrake are stronger; camphor and ipecac. are lower, while hydrastis and copaiba are easier.

BROMIDES are unaltered: Potash is 16c., ammon. 23c., and sodium 21c.

CAMPHOR.—Under the influence of competition prices continue to dwindle. \$1 is now quoted for American and foreign refined in bulk, a decline of 5c.

CAMPHOR OIL (Japanese) has been further reduced to 20c. to 22½c. for prime in 72-lb. cases, and 18c. to 20c. for the heavy by-product.

CASCARA SAGRADA continues strong, in sympathy with the conditions at the Coast, where less than the usual amount of peeling has been done. Spot prices range from 9c. to 11c., but 8½c. is still possible on a large order.

COPAIBA is not in great demand, and the downward course of values is unchecked: 45c. to 55c. is the quoted range for S. and C. American. The market for Para shows a steadier tone at \$1.25 to \$1.50.

DAMIANA.—Firm reports from the Coast maintain prices at 9c. to 10c., and any increased demand, it is thought, will result in a higher level of values.

EUONYMUS BARK is in good demand, with limited offerings. Quotations range from 40c. to 45c. as to quality, quantity, and seller.

HYDRASTIS is lower at \$1.45 to \$1.55 for good quality. Less desirable parcels have been offered at \$1.40. (See cable.)

IPECAC.—There have been few inquiries, and quotations for Rio are reduced to \$1.62½ to \$1.65. Cartagena remains at \$1.35 to \$1.40.

MANDRAKE continued to harden during the week, owing to the strength of the primary markets. Some holders refuse to shade 6c., but 5½c. to 6c. is the general range.

MENTHOL.—Competition and consequent selling under the market culminated in a lower range of quotations—viz., \$2.55 to \$2.65. The shading of these figures is simply a matter of quantity and seller.

OPUM.—The market continues strong, with quotations unaltered at \$7 for case lots, \$7.05 to \$7.10 for small jobbing parcels, and \$7.80 to \$8.05 for powdered. Cables from Smyrna justify a further advance, but holders are unwilling to discourage the already small demand.

PEPPERMINT OIL is unsettled. Some dealers are firm in their views as to values, while others are willing to shade the current quotations—\$1.75 to \$2.

SARSAPARILLA.—Mexican is stationary at 8c. Honduras attracts little attention at 45c. to 50c.

SASSAFRAS OIL.—The market is unsettled, and quotations show the wide range of 65c. to 75c. The artificial (quoted at 45c. in drums) is largely replacing the natural for flavouring-purposes.

SENEGA is meeting with a steady demand. Spot prices are 48c. to 49c. for old, thoroughly dried root. New Canadian is offered at 44c. to 45c., c.i.f. New York.

SERPENTARIA is quoted at 39c. to 40c.

Mitcham Crops.

Messrs. J. & G. Miller, of Mitcham, write as follows:

PEPPERMINT again this season is a disappointing crop throughout the whole of the district. This is due principally to the abnormal weather during the past four months. Many fields are attacked with the blight badly, others slightly (technically known as the "snuff"), and will have to be harvested prematurely. Our own total yield will be less than last year, but should the weather prove unfavourable during harvesting it will be much less. The total yield of the whole district will be about the same as last year providing we have favourable weather during the next few weeks; if unfavourable it will be much smaller. All old oil has been cleared out from growers' hands at high prices. We have recently sold out at 36s. per lb. net. We much regret that the prospect for lower prices this season is very remote. Large crops and lower prices would accord better with our wishes. Cutting of the crop has commenced in several places before it has matured, owing to the attack of blight.

LAVERDER.—There is only a small acreage of this crop, which has improved a good deal during the last few weeks; but this will not affect the price of the oil from this district, as nearly the whole of the crop will be cut and sent to the London markets to be sold in bunches, this paying the growers better than distilling the herb at the low prices which have ruled for oil in recent years. There is still a considerable quantity of old oil in the hands of the growers.

CHAMOMILE is looking well, but the acreage is very small, and there are no old stocks left.

Foreign Trade Statistics.

THE following table shows the imports and exports of drugs, chemicals, etc., to and from the United Kingdom from January to July 1905, 1906, 1907, as given in the Board of Trade Returns:

Imports.

Drugs, Chemicals, etc.	1905	1906	1907
Bleaching-materials ... cwt.	127,345	146,525	112,236
Boron compounds ... "	139,689	212,542	176,511
Brimstone ... "	247,866	301,659	216,311
Coal products, not dyes... "	50,653	55,678	48,471
Cream of tartar ... "	37,098	39,581	42,682
Glycerin ... "	55,195	26,430	27,517
Muriate of ammonia ... "	3,493	5,920	2,639
Saltpetre ... "	106,776	137,229	136,462
Soda compounds... "	224,820	179,733	215,789
Sulphuric acid ... "	57,382	52,698	43,591
Tartaric acid ... "	21,259	23,670	24,323
Unenumerated chemicals	£ 1,128,282	1,222,497	1,625,084
Cinchona ... cwt.	19,109	15,905	15,103
Quinine and other salts	oz. 437,164	1,215,716	1,662,606
Unenumerated drugs and medicines ...	£ 709,383	595,304	628,860
Alizarine and alizarine dyes ... cwt.	27,520	30,861	35,733
Aniline ... "	96,773	109,686	121,155
Synthetic indigo... "	16,971	21,836	24,537
Other coal-tar dyes ... "	757	491	330
Indigo ... "	7,318	7,699	9,692
Quicksilver ... lb.	2,473,568	2,759,701	2,845,546
Gum arabic ... cwt.	37,700	43,267	62,046
Shellac, etc. ... "	51,503	50,533	66,135
Turpentine ... "	264,066	268,057	261,447
Soaps, household ... "	174,522	162,567	181,871
Toilet-soap ... "	12,169	10,805	9,945

Exports.

Bleaching-materials ... cwt.	510,930	568,850	626,901
Coal products, not dyes—			
Aniline and coal-tar oils ..	435,071	764,353	945,113
Carbolic acid ... "	79,693	67,734	78,744
Naphthaline and anthracene ... "	56,375	50,770	52,776
Other sorts ... "	5,862,622	6,677,457	7,046,263
Copper sulphate ... tons	52,585	39,191	40,201
Cream of tartar ... cwt.	601	659	628
Dye-stuffs—			
Products of coal-tar ... "	31,107	23,029	28,470
Other sorts ... "	98,822	111,351	104,760
Glycerin ... "	74,619	95,206	125,722
Chemical manures ... tons	269,442	284,583	311,021
Quinine and other salts... oz.	426,528	635,226	573,191
Unenumerated drugs and chemicals ...	£ 817,780	867,588	1,010,461
Ammon. mur. ... cwt.	50,323	66,655	99,871
Painters' colours ... "	1,013,088	1,147,050	1,200,579
Soda, ash ... "	837,992	933,182	1,268,962
Bicarb. ... "	256,232	214,069	255,719
Caustic ... "	835,691	916,444	842,773
Crystals ... "	112,089	99,255	100,658
Sulphate... ... "	352,647	506,763	564,027
Other sorts ... "	190,497	203,857	272,055
Sulphuric acid ... "	46,243	54,482	43,917
Tartaric acid ... "	1,048	716	1,346
Unenumerated chemicals	£ 1,404,511	1,598,405	1,613,048
Soap, household ... cwt.	735,218	667,011	690,361
Toilet-soap ... "	25,041	26,895	26,859

Re-Exports.

Gum arabic ... cwt.	15,791	10,891	14,424
Shellac and other lacs ...	58,644	38,113	35,686
Quicksilver ... lb.	994,525	1,103,102	1,431,618
Coal products, not dyes	1,466	8,753	2,740
Cream of tartar ... "	5,812	4,515	4,151
Glycerin ... "	34,284	5,828	9,590
Muriate of ammonia ... "	2,228	320	440
Saltpetre ... "	8,942	8,386	12,136
Tartaric acid ... "	2,079	2,170	1,608
Unenumerated chemicals	£ 136,328	111,266	143,177
Cinchona ... cwt.	6,627	5,255	4,519
Quinine and salts ... oz.	59,077	45,236	299,758
Soap, household ... cwt.	5,457	6,741	7,065
Toilet-soap ... "	1,150	477	514

Camphor Notes.

Camphor Propagation.

The camphor plant has been attracting the attention of Ceylon planters during recent years, especially since the advance in price, but the chief obstacle in the way of cultivation has been the difficulty in procuring good germinating seed. The methods of propagating by other means than seeds have engaged the attention of the Royal Botanic Department recently, and the results are embodied in a useful circular by Mr. J. K. Nock. The easiest method is, of course, raising plants by seed, if good seeds are obtainable. The other methods are by (1) layering, (2) branch cuttings, (3) root cuttings, (4) suckers. Mr. Nock explains the methods explicitly, so that there should be no difficulty in carrying them out from his directions. The only difficulty is that comparatively few estates have mature trees from which to take cuttings. The circular is Vol. IV. No. 3, and can be obtained from Peradeniya.

Camphor in Japan.

The Japanese Minister of Finance is apparently alive to the importance of the fact that Japan must bestir herself in the production of camphor if she wishes to maintain control of the industry in years to come. Addressing a recent conference of camphor commissioners in Tokyo recently, the Minister said he was gratified to notice that the general public had become aware of the importance of the industry, and to meet the ever-increasing demand he considered it advisable to encourage cultivation. It requires forty to fifty years to obtain raw material in trunks and roots, and in order to cover the pressing demand, he advocated the plantation on a large scale. He regarded it as a most lucrative industry, and the forestry bounty, as sanctioned by the Diet last session, is mainly assigned to camphor plantation with that object in view. While thus encouraging the plantation and the improvement of camphor manufacturing, the Government intends, he said, to promote also the exportation and increase facilities for supplying the demand. For this purpose the Government last year despatched commissioners to Europe and the United States to investigate the conditions regarding the demand.

Formosan Camphor.

The United States Consul at Tamsui, in a report of an interview with the Chief of the Camphor Bureau of the Formosan Government, states that the manufacture of camphor in Formosa is confined to trees upwards of fifty years old, the Bureau prohibiting the cutting down of trees of a less age. Recent investigations warrant the statement that the supply of old trees will, at the present rate of cutting, become exhausted in less than fifty years. The old trees now standing are confined to the mountainous eastern half of the island in regions for the most part under control of savage tribes. These mountains are covered with dense jungles, and the work of building roads in order to render the camphor-forests accessible to profitable exploitation is one requiring the expenditure of much time and labour. Moreover, the sanitary conditions are such as to materially reduce the efficiency of the labour employed. A Japanese company took a thousand coolies into the Daito prefecture a few years ago for the purpose of exploiting the camphor-forests, but 33 per cent. of its labour was incapacitated by fever. At present the greater part of the camphor produced in the island comes from the trees in the Toon prefecture. The Bureau expects to produce 5,000,000 kin (6,667,000 lb.) of crude camphor, and about one-half that amount of camphor oil during the present year, whilst a similar quantity will be produced each year during the next few years. Since 1900 the Japanese Government has planted about three million young trees, and has arranged to add another 500,000 during the present year, and expects to be able to plant 750,000 each year after the present year. There are two varieties of trees—the camphor-producing tree and the camphor-oil-producing tree, the former being the more valuable. Private concerns in Formosa desirous of engaging in the raising of camphor are supplied by the Government nurseries with the young plants. Although the Customs returns for China show that 12,000 piculs of crude camphor were exported from that country in 1906, yet the Formosan industry fears no competition from that source. Reports of planting camphor in Ceylon, Florida, Texas, and Mexico do not disturb the prospects of the Formosan product in the eyes of the authorities. These contend that the more camphor trees planted the less likelihood there will be of the successful production of an artificial substitute. The Camphor Bureau has instructed its selling agents to supply first and foremost its customers among the celluloid manufacturers. In future these manufacturers will receive their supplies upon a basis of their actual demands. As Japanese capital is already engaged in the erection of celluloid factories in Japan, it is only to be expected that the Japanese maker will also come in for his *pro rata* share of raw material.



TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. Publication of letters does not imply our agreement with the arguments or approval of the statements therein. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects presumably of interest to our readers generally. Letters received after the early posts on Wednesday cannot as a rule be dealt with in the current week's issue.

BUSINESS INFORMATION.—We have very full records of the makers or agents for articles and products connected with the chemical and drug trades, and supply information respecting them by post to inquirers. Inquiries regarding any articles which cannot be traced in this manner are inserted under "Information Wanted."

Bulgarian Otto of Rose.

SIR,—I have several times read in your esteemed journal news regarding the present crop of Bulgarian otto of rose. Will you permit me to state that your correspondent must have been deceived with regard to the actual state of the market? According to the official totals of the Chamber of Commerce of Philippopolis, the crop is not more than 2,500 to 2,600 kilos., against 4,500 kilos. of last year. One must not take into consideration the stock which is said to be in reserve in the hands of the so-called "jobbers," as your correspondent calls them; these stocks date back for more than fifteen years, and are, therefore, too old, and in most cases too low in quality, to be sold even as second quality ottos. It is not true that the market is quiet in Bulgaria; on the contrary, it has been very active since the opening. More than four-fifths of the crop has been bought by exporters. In fact, there are only three villages where the otto has not yet been sold and where the equivalent of 30s. per oz. is being asked. So sure am I of the above facts that I shall be greatly obliged if you will publish them in your journal on my responsibility. The Chamber of Commerce would, I am sure, give you the most disinterested information and tell you the exact truth.

I am, Sir, yours faithfully,

London, E.C.

CHRISTO CHRISTOFF.

The Legislative Position.

SIR,—Mr. Reid's idea of bargaining is out of date, just as cattle-fairs have been replaced by auction-marts where demand, not argument, rules the price. Asking more than we expect or deserve has had (in the past) the result of making sensible legislators turn their backs on us.

JAY MACK. (198/21.)

The Weak Spot in Pharmacy.

SIR,—I have read your illuminating leading article with great interest. The subject is vital to the future of pharmacy, and everyone who has the welfare of the trade at heart ought to give due heed to your warning note. There are one or two points I wish to emphasise in order to still more clearly show the serious state of affairs, and especially the parlous position of official pharmacy.

I have heard your figures criticised from the point of view that the number of entries for the Minor vastly exceeds the number who pass the Preliminary, but this need occasion no surprise. The explanation is simply that on the average every candidate has three "shots" at the Minor before he gets through, and thus the real number of candidates is only one-third of the total number of entries. Since 1901, when the old Preliminary disappeared, there have been in the six complete years 8,899 entries for the Minor (my figures are taken from the Registrar's annual returns—yours, which are smaller, are probably taken from the actual numbers examined). Of these, 2,974 entered for the first time, and 5,925 entered for the second, third, or fourth time. The total number who passed was 2,923, almost exactly one-third of the total entries. During these same six years 1,123 students were registered.

It would appear that almost all the candidates are now

completing their examination, which is a distinct contrast to what was the case ten years ago, when there was an apparent leakage every year. During the five years, 1896-1900, the number of new candidates was 3,627, and the number of passes in the same period was 2,598, a difference of 1,029, showing an apparent leakage of over 200 a year. But, fortunately for pharmacy, these men appear still to be qualifying, otherwise by this time things would have been much worse even than they are. During the last six years 1,123 students have registered, and I think it is fair to assume that quite half of these, say 600, have not yet passed the Minor. Deducting the 523 students who, we assume, have passed, from the 2,923 Minor passes during these six years, there remain 2,400 who must have passed their Preliminary under the old conditions. These men are, no doubt, drawn from the failures previous to 1900, and the crowd, 1,753, who passed the Preliminary in 1899 and 1900. It appears to me, however, that the ranks of these old Preliminary men must be getting very, very thin, and within a few years from now they will be quite depleted, and then we must rely for candidates on those only who have since 1901 registered as students. Of that class I assume that 600 are not yet qualified; probably other 600 "chronics" remain. This makes three years' supply at our present rate of using them up, and after that only newcomers will be available. These I estimate will not exceed 400 a year on the average. Will this number supply the demands of pharmacy? I fear not.

You advocate the resumption by the Pharmaceutical Society of the conduct of the Preliminary examination. I have done this for the past ten years, for I preached the doctrine before the change was brought into effect. I am glad now to have the support of such a powerful ally, for hitherto you have said little on this aspect of the case. I fear, however, that we do not agree on the reasons for a change. It does not follow that the return to an *ad hoc* examination would have the effect you desire. I maintain, and have maintained for years, that the present requirements in preliminary education for a pharmacist are needlessly severe, and that the standard should be lowered. A high standard of general education will not pass a man, otherwise how can you explain the failure at a recent Minor examination of a Ph.D., with a brilliant record in chemistry and possessing excellent pharmaceutical skill? It almost seems as if the possession of a first-class University degree and high culture were really a disadvantage for the Minor examination. But don't let any hare-brained critics run away with the notion that a good general education is of no account. It is; the more a man has the better for him, but not necessarily in the line of the present preliminary subjects.

If the Society retrace their steps and again take up the Preliminary, as I think they ought to do, what is likely to happen is this: they will continue the present standard, for its continuance will ensure thousands of failures and thousands of re-entry fees, and in this way they will replenish the coffers that are now so empty.

That they need the fees is only too evident. The lean years are at hand, after a series of fat times when the prospect of prosperity seemed illimitable. Now the horizon is very circumscribed indeed. The net surplus from examinations and registrations during the seven years 1896 to 1903 was over 7,500*l.* a year. During the last three years the net annual surplus was 5,660*l.*, being a drop of over 5,000*l.* in the three years, and this year the surplus will in all probability be under 5,000*l.*

No society without the wealth of Cræsus could long continue to exist under such conditions as these, especially as the expenditure at the Square bears a relation to the incomes of the fat years rather than to those of the lean.

Yours very truly,

COSMOPOLITAN. (69/82.)

Workmen's Compensation Insurance-policies.

SIR,—At the evening meeting of the Federation in Manchester last month I happened to remark that my workmen's compensation insurance-policy was inscribed "shop risk only," and expressed a doubt whether this met the risk incurred when an assistant is engaged anywhere out of the shop in the employer's service. Mr. H. G. Williams, Sheffield, who was present, very kindly wrote to me afterwards quoting the terms of his policy, which are: "On the em-

ployer's premises at 118 The Moor, Sheffield, or elsewhere in the district, while on the employer's business."

In order to ascertain the exact legal force of the expression "shop risk only," I have communicated with the company by which I am insured. The following is the essential part of their reply:

"We would point out that the reason for the policy being marked 'shop risk only' is to show that we do not cover the risk of any vanman or other outdoor assistant you may employ at any time, but simply shop-assistants, any of whom may, of course, go outside on your business at any time. While so employed these assistants are entirely covered by the policy."

As the matter closely affects the interests of chemists who are employers, I trust you will give this letter publicity.

Yours, etc.

J. P. GILMOUR

312 Cathcart Road, Glasgow.

Easton's Syrup Tabloids.

H. E. M. (197/24), referring to "Xrayser's" remarks on the retailing of Easton's syrup tabloids (*C. & D.*, August 10, p. 245), writes: "We always require purchaser's signature and refuse strangers. Are often informed, 'This is very unusual. I have never had to do all this before. I have bought them many times before without this fuss.'"

Legal Queries.

See the "*C. & D. Diary*, 1907," for much legal information as to all trade matters. In any circumstance not covered by the articles therein, state the case explicitly with all particulars and submit to the Editor.

Apprentice (194/2).—Deliberate disobedience by an apprentice, such as absenting himself for the greater part of the day after his employer has declined to grant leave, would under ordinary circumstances terminate the engagement—that is to say, the employer need not give a month's notice. As you do not furnish us with a copy of the indentures, we cannot say whether or not the act of disobedience is contrary to the conditions of the contract.

Ajax (194/40).—The sign which you propose embodying the description "manufacturer of artificial teeth," "teeth carefully extracted," would not, in our opinion, render you liable to prosecution under the Dentists Act.

Livingstone (196/34).—The words "elixir," "extract," "compound," "mixture," or "syrup" could be used in place of balsam in the title "balsam of aniseed."

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months. A preliminary condition for reporting on samples submitted is that all particulars as to source and uses are given to us.

Bolus (194/14).—EXCESSIVE PERSPIRATION or hyperidrosis in the armpits of women is allayed by the application of liniment of belladonna; but in such a case as you describe the safest application would be a mixture of formalin 3ss. and rose-water ʒviij., to be applied night and morning. Once or twice a week belladonna liniment may be applied in the evening.

Norseman (193/52).—The two plants collected in the neighbourhood of the Mumbles are the water figwort (*Scrophularia aquatica*) and the vervain (*Verbena officinalis*). The first is a plant growing from 3 to 4 feet high with quadrangular branched stems dark green, and in the specimen sent distinctly purple in colour. It is found in this country by the sides of ditches and in other moist situations. The flowers when fresh are of a reddish purple. The generic name *Scrophularia* refers to the former use in scrofula, to which this plant and its ally the knotted figwort (*Scrophularia nodosa*) were put. The second specimen with the terminal spikes of purple flowers is the vervain. It grows from 1 to 2 feet high, and is found on dry, waste ground and roadsides in England and Ireland, but is absent from Scotland. The plant has a slightly bitter and astringent taste, and was formerly used in jaundice, dysentery, gout, throat-diseases, and many other ailments.

H. A. M. (194/6).—DRIED HERB.—The sample you send is the dried inflorescence of *Tilia europæa*. Lime-flowers are used in the form of an infusion as a household remedy on the Continent to relieve headache and abort colds.

Lemcit (184/25).—ASSAY OF CITRAL.—The following is the U.S. Pharmacopœia method which you require:

Introduce into a counterpoised 150-c.c. flask by means of a pipette about 15 c.c. of oil of lemon, and note the exact weight; add 5 c.c. of distilled water and a few drops of phenolphthalein test solution, and then neutralise the liquid exactly by the cautious addition of tenth-normal sodium hydroxide volumetric solution. Add 25 c.c. of a neutral solution of sodium sulphite (1 in 5) and immerse the flask in a water-bath containing boiling water. From a burette add, as needed, just sufficient half-normal hydrochloric-acid volumetric solution to maintain the neutrality of the mixture, keeping the flask continuously heated and frequently agitated, and adding a drop or two of phenolphthalein test solution. When a permanent condition of neutrality is reached, note the number of c.c. of the half-normal hydrochloric-acid volumetric solution consumed. Carry out a blank test, identical with the foregoing, except that the oil of lemon is omitted, and note the amount of half-normal hydrochloric-acid volumetric solution consumed. Subtract the number of c.c. required in the blank test from the number required in the original test; each c.c. of this difference corresponds to 0.03802 gram of citral. To find the percentage, multiply the above difference by 0.03802 and this product by 100 and divide by the weight of the oil of lemon taken.

Stearine (195/31).—CHEMICAL HARDENING OF LARD.—We can only suggest that you try some of the well-known siccatives, such as aluminium linoleate, lead borate or resinate, manganese borate, linoleate or resinate.

A. C. M. (195/57).—PHOTOGRAPHIC BOOKS.—We gave the titles, publishers' names, and prices of the principal books on photography in the bibliography published in the *Diary*, 1906, to which we must refer you.

X. Y. Z. (193/51).—CARAMEL-MANUFACTURE.—The pan would need to be of a capacity of at least 50 gals. if 5 cwt. of glucose is used for each batch. Steam-heat is generally employed. You will find the advertisements of several engineering firms who specialise in chemical plant in the *C. & D.* and the *Diary*.

F. G. (197/5).—SITUATION IN SPAIN.—You should advertise in the Supplement of the *C. & D.*, which is a necessity to the conductors of international pharmacæies.

B. & F. (194/73).—If the dark colour is due to the iron drum, of which you should be the better judge, the polish should be stored in earthenware.

M. E. D. (Calcutta) (186/62).—We do not know the book you refer to.

Ph. H. (Amsterdam) (186/70).—CONCENTRATED WATERS.—The manufacture of these preparations is described in "Pharmaceutical Formulas." Cassia, pimento, rose, and spearmint waters are made after the recipe given in the *C. & D.*, July 20, p. 102. In making aq. rose conc. omit a drachm of the otto and replace it with ol. ros. geran. ʒss., which rounds off the aroma better. Anise, cloves, caraway, cinnamon, and fennel waters are made after the following model:

Aqua Anethi Conc.

Ol. anethi	...	...	...	m.c.
Aq. fervid.	...	...	...	ʒviij.
Spt. rectificat.	ad	...	...	ʒxviij.

Dissolve the oil in 10 oz. of the spirit, and add the hot water. Shake well and set aside for a day or two. Decant, and filter through 2 dr. of kaolin; then make up the filtrate with spirit to 18 oz.

H. W. (184/47).—The book you refer to is Mabel Thomson's "Apothecaries' Hall Manual," published at 2s. by Whittaker.

W. T. (184/51).—THIELEMAN'S CHOLERA-DROPS.—The following recipe for this Swedish medicine is from "Pharmaceutical Formulas":

Ol. menth. pip.	...	...	...	ʒj.
Spt. rectificat.	...	...	...	ʒviij.
Tr. opii crocat.	...	...	...	ʒiij.
Tr. opii	...	...	...	ʒviij.
Tr. valerianæ	...	...	...	ʒxiiiss.

M.

Dose: One fluid drachm.

E. W. (103/11).—(1) BRITISH QUALIFICATION IN CANADA.—See Educational Number (August 10), p. 258. (2) The *C. & D.* Supplement is the best publicity medium for situations.

Inquirer (197/65).—You do not say what dose of powder is to be given to the fowls. The antim. nig. should be apportioned so that from 1 to 3 grains is given for each dose.

H. C. & Co. (198/9) and A. Z. (192/46).—PAINT-REMOVER.—See *C. & D.*, March 9, p. 400.

A. H. J. (87/40).—(1) PREVENTING MOISTURE CONDENSATION on spectacles.—A trace of soft-soap applied daily prevents steam condensing on spectacle-lenses. There are also several special preparations for this purpose, such as crayon anti-buée, and lasin; these are advertised in the *C. & D.* and the *Diary*. (2) We are inquiring.

E. S. (186/35).—SALOL LIQUID DENTIFRICE:

Salol	5j.
Saccharin	gr. ij.
Oil of peppermint	5j.
Oil of anise	℥v.
Oil of fennel	℥v.
Oil of cloves	℥ij.
Oil of cinnamon	℥j.
Rectified spirit to	5vj.

Dissolve and filter.

J. E. (181/5).—FOOD-VALUES.—It is difficult to answer your question within the limits of these replies. The matter has been dealt with at various times in the *C. & D.*, and such questions as yours show the practical value of a file of this journal. Taking up the first volume for 1904, for instance, the index gives two references to food and its nutritive value, and on turning up the two papers the searcher finds in the four columns they occupy a condensed treatise giving probably all the points he wishes to know about. About a year ago (October 13, 1906, p. 562) we published detailed analyses of the principal proprietary foods, which you should refer to. It would also be a good plan to communicate with the makers of infants' and invalids' foods, as they have special literature written for medical men showing the food-value of their preparations.

Creta (181/61).—(1) BLACKBOARD-PAINT:

Shellac	5iv
Lampblack	5ij.
Emery-powder	5j.
Ultramarine	5j.
Spirit	Oij.

Dissolve the shellac in the spirit; place the lampblack, emery, and ultramarine on a cheese-cloth strainer, pour on part of the shellac solution, stirring constantly, and gradually adding the rest of the solution until all of the powders have passed through the strainer.

(2) We require some further particulars as to the "sedative solution of quinine," the request being too vague to answer satisfactorily.

W. E. B. (190/28).—GAPE-CURE FOR CHICKENS.—This is carbolic acid. We reproduce the directions for the benefit of other inquirers:

Take a wooden box, a little bigger than a biscuit-tin, and divide it in two by means of a piece of wire netting. Now place half of an ordinary brick, made very hot by means of fire, on one side of wire netting and the chicks on the other. Cover the whole box with a cloth, and then insert under the cloth a table-spoon with teaspoonful of the cure in it. Now pour the liquid on to the hot brick and withdraw spoon. The fumes will cure the chicks in two minutes.

Take out the chicks *just before* they are apparently suffocated.

Be careful to keep the hands and face away from the liquid when it is poured on to the brick, as it will blister the skin.

If chicks are *not* cured keep them in the fumes longer.

J. G. (179/34).—WATER-SOFTENING POWDER.—The characters of this powder are very distinctive—it is Crescent brand soda sesquicarbonate. It is more difficult to tell what the powder is perfumed with, as many perfumes alter in odour after being in contact with alkaline salts. It is usual to employ ionone to obtain the violet odour, as that synthetic perfume does not change, but in your sample there is a distinct suggestion of santal and patchouli.

M. J. (185/8).—To become an oculist the medical curriculum is needed, but perhaps you intended to inquire as to opticians' qualifications. Particulars of the educational requirements for medical men and opticians were given in the Educational Number (August 10).

Economy (172/72).—We are not acquainted with the ink-ribbon you refer to, but presume it is of the same class as that used in typewriters. Particulars of typewriting ink-ribbons were given in the *C. & D.* as recently as May 25, p. 818.

Tick (173/19).—MEDICAL BATTERIES are generally charged with bichromate solution, but dry cells are also employed. Give us some further details of your requirements.

B. G. (185/13).—CHILDREN'S POWDERS.—It is a matter of opinion as to the best proportion of diluent and calomel for children's powders, but generally customers expect a powder

of small bulk, hence a dilution of 1 in 2 or 1 in 2½ is popular. If the latter, the doses would be as follows: Up to six months, 1 grain; over six months and under twelve months, 1½ grain; twelve months and under two years, 2½ grains; two years and under three years, 3 grains; over three years, 4 grains.

J. B. (Winnipeg) (172/57).—EMPLASTRUM MANUS DEL.—This is used on the Continent of Europe as a softening-plaster and for corns. It is made as follows:

Emplastrum plumbi	90
Cerati æruginis	10

The formula for CERATUM ÆRUGINIS is:

Ceræ flavæ	120
Resinæ pini	60
Terebinthinæ	40
Æruginis sub. pulv.	10

Rifleman (168/50).—(1) The sights of rifles are touched up with a paint made of lampblack and gold size. (2) The composition of the rifle-cleaning tablets was given in the *C. & D.*, March 23, p. 467. The patent for these tablets is still in force.

C. D. K. (193/45).—HALF-TONE BLOCKS.—The following is an outline of the process of making half-tone blocks. The original drawing or photograph is re-photographed, as the negative must give the dots on the finished block by which the printing-ink is retained. The negative is a reversed one, a mirror or prism being used with the lens for this purpose, while a "screen" before the plate gives the grain for the dots. The wet-collodion process is nearly always used in the trade, but there are several good dry-plates made for process-work, which small studios use with success. The negative is printed on to the metal of the block by what is known as the enamel or fish-glue process. The sensitising-solution is made up with either fish-glue alone or combined with albumen, ammonium bichromate being the sensitising-agent. The copper or zinc plate is cleaned and polished, and a pool of the sensitising-solution poured in the centre. The plate is then "whirled" till dry, heat being also employed. The plate is then printed on through the specially made negative, the exposure being regulated by the actinometer. The plate is next soaked in water and dye solution, and after a short immersion is gently washed to clear away the unacted-upon sensitising-solution. The next stages are drying (with spirit), "burning-in," and etching (with acid or iron perchloride). The above outline will enable you to indicate exactly the stage about which you need additional information.

J. G. (193/54).—APERIENT-POWDER.—The following formula represents the composition of the sample you send:

Sulphur. sublim.	5ij.
Magnes. carb.	5j.
Pulv. cinnam. co.	5j.

Misce.

Dose: One teaspoonful.

Smoke (181/66).—DRAIN-TESTING PAPER.—This appears to be simply thick brown paper saturated with crude oil of tar.

W. V. W. (187/66).—GAPE AND ROUP POWDER FOR CHICKENS. The active ingredient of this powder is copper sulphate, the trace of rosaniline that is present being for the purpose of disguise. For gapes in chickens 15 grains is dissolved in each quart of the drinking-water, while for the purpose of a lotion for canker and sore eyes the strength is double what has just been indicated.

E. W. (195/27).—The sample of roup-powder you send has the same composition as the above.

Experiment (Cape Colony) (197/34).—TREATING DAMP WALLS. When sodium silicate is used the liquid is diluted with water sufficiently to make it easy of application, but alum and lime compositions are more usually employed in this country, the following being a representative formula:

Slaked lime	56 lb.
Sugar	14 lb.
Alum	3 lb.
Boiled oil	2 gals.
Terebene	5 pints
Warm water	9 gals.

C. C. H. C. (182/28).—RED MITE IN CANARIES.—This parasite often attacks canaries. To get rid of it well dust the bird with insect-powder, especially under the wings, and as a further precaution paint the cage over with pine oil or terebene, working it well into the cracks and crevices of the cage. A handkerchief or white cloth thrown over the cage every night will attract the insects after the cage has been painted over. Remove the handkerchief in the morning, destroying the parasites. If the bird takes a bath, add a teaspoonful or so of infusion of quassia to the bath-water.

Tartar (174/25).—DRINK-CURE.—The powder you send contains a trace of potassium bromide with tartarated soda.